DOCUMENT RESUME

ED 412 400 CE 074 961

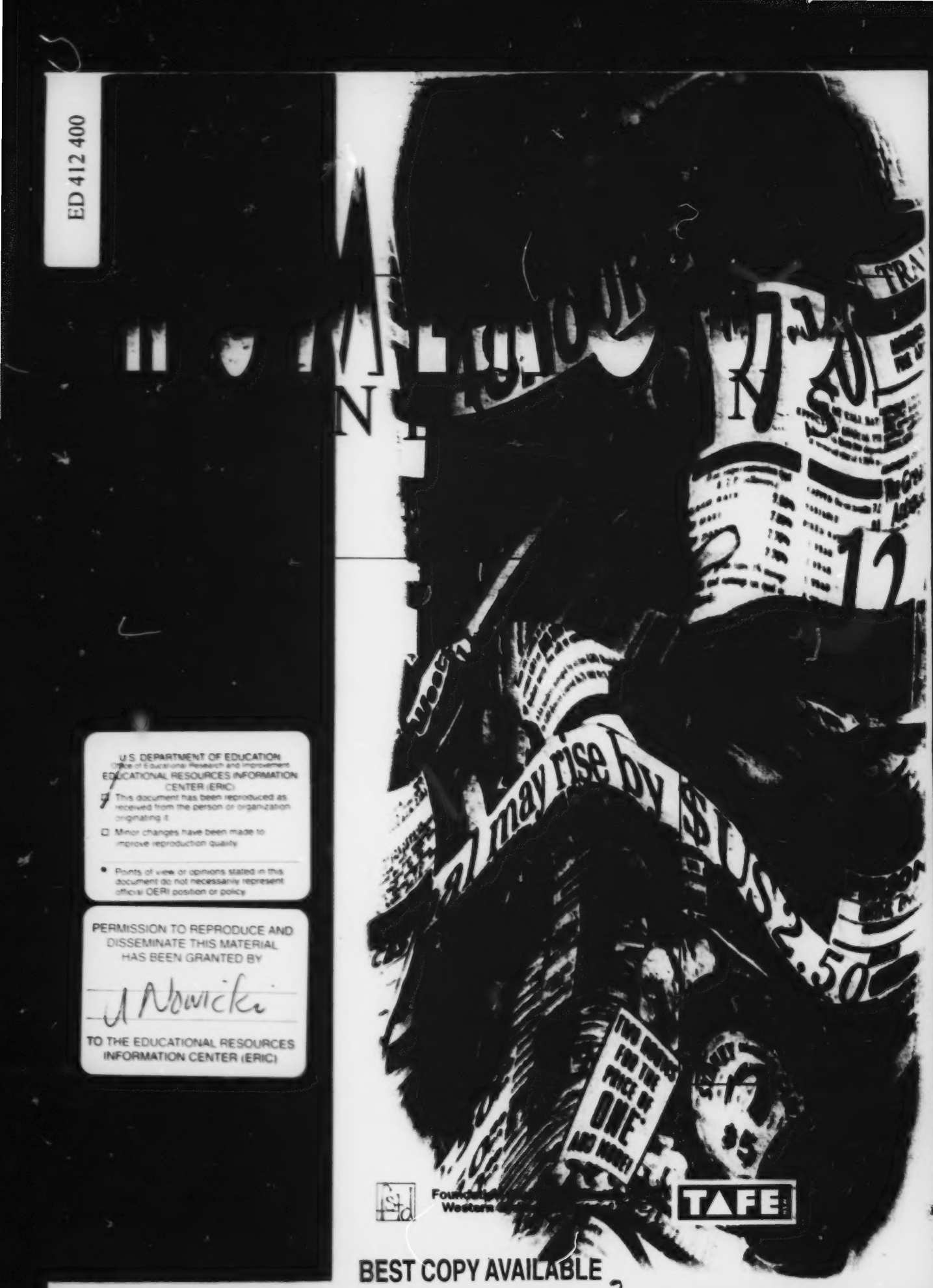
TITLE	Numerous Connections.
INSTITUTION	Western Sydney Inst. of TAFE, Blacktown (Australia).
ISBN	ISBN-0-7310-8840-9
PUB DATE	1996-00-00
NOTE	213p.
AVAILABLE FROM	Adult Literacy Information Office, Level 1, 6-8 Holden Street, Ashfield, New South Wales 2131, Australia.
PUB TYPE	Guides - Classroom - Teacher (052)
EDRS PRICE	MF01/PC09 Plus Postage.
DESCRIPTORS	Adult Basic Education; *Adult Literacy; Basic Skills; Foreign Countries; Instructional Materials; *Integrated Curriculum; Learning Activities; *Literacy Education; Mathematics Instruction; *Mathematics Skills; *Numeracy; Student Evaluation; Teaching Guides
IDENTIFIERS	Australia

ABSTRACT

This resource includes units of work developed by different practitioners that integrate the teaching of literacy with the teaching of numeracy in adult basic education. It is designed to provide models of integration for teachers to develop similar resources on different contexts or themes. The units follow slightly different formats. Unit lengths vary from a few sessions to the basis of a semester's work. The way in which literacy and numeracy are integrated also varies; in some units there are literacy and numeracy activities on the same theme or context, and in others activities are more closely woven. The nine sections are on these topics: water, gardens, reasonable force, aboriginal land, work, women in Australia, tourist spots, juggling pool, and banking. Components of each section include the following: learning outcomes; topics; resources; future directions; teacher notes that correlate in a column format whether the activity is primarily literacy or numeracy or both, activities, resources, and assessment; and handouts. Units list additional resources that can be used to extend the students' understanding of particular mathematical skills. The activities have been written for students with skill levels across the whole spectrum of students involved in adult basic education classes, from beginning reader/writers to more advanced level students. (Contains 62 references.) (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 412 400



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

J Nowicki

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE

NUMEROUS
CONNECTIONS

for Foundation Studies Training Division
Adult Basic Education Programs

125 Main Street
PO Box 515
Blacktown NSW 2148
Ph (02) 9672 9555
Fax (02) 9672 9544

First Published 1996

© Foundation Studies Training Division TAFE NSW, 1996

Copyright of this material is reserved to Foundation Studies Training Division, Western Sydney Institute of TAFE. Reproduction or transmittal in whole or part, other than for the purposes and subject to the provision of the Copyright Act, is prohibited without the written authority of Foundation Studies Training Division, Western Sydney Institute of TAFE.

ISBN 0 7310 8840 9

INTRODUCTION

The concept of integrating the teaching of literacy with the teaching of numeracy in Adult Basic Education is not new. Good practice in Adult Basic Education demands that skills be taught in their appropriate context and good teachers have always integrated the two, to a greater or lesser degree.

However, with the emergence of accredited curricula and workplace basic education and increasing requirements for accountability, practitioners have begun to examine the practice of integration and attempt to articulate the theories which underpin it.

Exploration of the concept is, however, in its infancy and the theories of learning which underpin these units of work are not, therefore, complete. Even definitions of the terms literacy and numeracy are constantly shifting so that an attempt at a definition of an integrated program is problematic. Such programs are, however, based on several assumptions:

Firstly, that literacy and numeracy must be taught in their appropriate context. It follows that many (but not all) areas of adult understanding and discussion involve an understanding of literacy **and** numeracy and the two are often interdependent.

Secondly, that the learning of numeracy cannot exist without an understanding of the language of numeracy. Allied to this is the notion that most adult numeracy tasks in the 'real world' involve problem solving in which language, literacy and numeracy are intertwined.

Thirdly, that if our practice is situated within a framework of critical pedagogy, then this must combine both literacy and numeracy. Chapman and Lee refer to mathematics as being "among the most powerful cultural technologies in whatever forum and mode it appears and it is difficult to imagine a critical literacy which does not take this into account."

The traditional technique-oriented maths curriculum has been presented as a set of objective truths to be learnt and not one which encourages a spirit of enquiry which a critical pedagogy demands. Mathematical propositions which are presented to us in the 'real world' and which require a critical response from us invariably require an integrated response.

About This Resource

The Units of Work included here have been developed by different practitioners. They are presented as a collection of examples of the various ways in which a number of experienced practitioners have interpreted the challenge. Thus, the units follow slightly different formats although, for ease of use of the resource, some attempt has been made to standardise this.

Chapman,A and Lee,A. (1994) "Rethinking Literacy & Numeracy" in *An integrated Approach to Teaching Literacy and Numeracy*. Sydney: Adult Literacy Information Office.

The resource has been developed to provide a series of models of integration for teachers to then develop similar resources on different contexts or themes.

The lengths of the units vary greatly. Some will cover only a few sessions whereas some may form the basis of a semester's work. The way in which literacy and numeracy are integrated also varies according to the possibilities of the context being explored. In some units they are simply literacy activities and numeracy activities on the same theme or context, and in some they are more closely woven.

This gives scope for different approaches to some of the practical difficulties involved in the integration of literacy and numeracy teaching.

One of the greatest of these lies with the differing expertise of the teachers involved. Developing an integrated program is less problematic if the teacher has expertise in both fields. However, most do not. The first column in the Teacher Notes in the units indicates whether the activity is primarily literacy, or numeracy or both. This allows for two teachers, with different expertise, to be working on the same unit if a number of the activities in that unit are separate literacy or numeracy activities. However, if it is difficult to separate the literacy from the numeracy in most of the activities in a particular unit, then the unit will best be taught by a teacher with expertise in both fields.

In the discussion surrounding integration of literacy and numeracy, concern is often expressed that numeracy will be the loser; that literacy teachers will skim over the teaching of important numeracy skills and that students in particular who wish to go on to further study will be ill served. For this reason, the units in "Numerous Connections" indicate, under the heading of *Additional Activities*, resources which can be used to extend the students' understanding of particular mathematical skills. There is an understanding that, at certain appropriate points, the theme being pursued will be put aside for direct teaching of numeracy skills where required.

The activities have been written for students with skill levels across the whole spectrum of students involved in adult basic education classes, from beginning reader/writers to more advanced level students. Teachers will need to determine which aspects of the units are appropriate for particular students or groups of students in their classes.

Finally, our thanks to the ABE teachers who have been responsible for developing this resource and to the Project Officers who have done a marvellous job of putting it together. We trust that it will go some way to meeting the needs of teachers faced with these new challenges in their teaching practice.

Pamela Osmond
Project Manager

ACKNOWLEDGMENTS

Project Manager	Pam Osmond
Project Officers	Sue Lord Leslie Stein
Contributors	Edd Ashmore Rita Brademann Marnie Duffus Julie Easson Jill Finch Lynda Henderson Caroline Kane Michael Keating Sue Lord Meredith Paton Terri Ryan Sue Sim Maggie Sinclair Leslie Stein
Readers	Edd Ashmore Diane Golden Dilys Norrish Anne McRae
Wordprocessors	Therese Dillon Julie Johnson
Graphic Design & DTP	Phuong Tran

CONTENTS

Section 1: **Water**
Can too much bring on a drought?

Section 2: **Gardens**
Gardens … Why and how?

Section 3: **Reasonable force**
An argument

Section 4: **Aboriginal land**
Mabo and other places

Section 5: **Work**
What is it? Who does it?

Section 6: **Women in Australia**
Women in Australia … a snapshot

Section 7: **Tourist spots**
Come and visit

Section 8: **Juggling pool**
From a new angle

Section 9: **Banking**
More for your money

SECTION 1
WATER

Water... can too much bring on a drought?

LEARNING OUTCOMES

In the context of this study students will:

- gather information and mathematical data
- interact with others and in groups
- reflect on learning
- get information and mathematical data from texts
- present information and mathematical data in texts
- solve problems
- increase confidence and participation
- make choices.

TOPICS

Language/Literacy

- listening/questioning
- genre - opinion writing
  - personal letters

Numeracy

- graphs and tables
- calculators

RESOURCES

- teacher notes 1
- handouts 1-9

to be supplied by teacher:

- additional newspaper articles, photos, headlines
- pamphlets on water conservation in the home
- pamphlets from Water Board
- models of opinion writing
- models of formal and informal letters

FUTURE DIRECTIONS

- other utility accounts
- environmental issues such as logging, recycling, water pollution

	Activities	Resources	Assessment
Introduction	**Our water: what's the problem?** • brainstorm issues and concerns about water quality and conservation • read and summarise main articles for main ideas	headlines and photo prompts newspaper and magazine articles	teacher observation of student participation
Language/ Literacy	**Reasons for water conservation** • predict facts and figures about water • listen to tape or reading of text • check answers to quiz • discuss – who uses water? – why do we need water conservation? – where to start?	handout 1 teacher notes 1 handout 1	student self-assessment reflect critically on problem
Language/ Literacy/ Numeracy	**Saving water in the home** • find information on water wasters and water savers in home • fill in table and answer questions • identify areas of water wastage/ water saving in home • discuss water saving in the home	handout 2 handouts 3, 4 handout 5	evaluate results of survey

	Activities	Resources	Assessment
Language/ Literacy Numeracy	**Help!** • brainstorm advice for a family on how to be waterwise • report findings **A letter of advice** • write a personal letter	handout 6	contribution to discussion group presentation write letter
Language/ Literacy	**What's your opinion?** • discuss pros and cons of water bans • model 'letter to the editor' and compare with personal letter • discuss editing process • write letter of opinion	handout 7 handout 8 (OHP of scaffold)	draft and edit letter of opinion
Numeracy Language/ Literacy/ Numeracy	**Water Audit** • discuss purpose of water audit • model • revise maths needed for water audit • observe household water consumption for a week • present research to group	calculators handout 9	student notes/ observation on water usage completion of audit participation in group discussion teacher observation

	Activities	Resources	Assessment
Reflection	**How has your usage of water changed ?** • what do you want to follow up?	group, newspaper articles	teacher observation students formulate questions

additional activities

Water Consumption *Everyday Maths* (1990), pp. 30 - 37.

The concept for this section was developed by Rita Brademann.

AMAZING FACTS ABOUT WATER

1. **What percentage of the earth's water is fresh water?**

   2% 20% 50%

2. **How much money did Australia spent on supplying drinking water last year?**

   8 million 80 million 80 billion

3. **How much of this water was used for drinking and cooking?**

   1% 10% 50%

4. **How much water was used to make ONE newspaper?**

   7 litres 70 litres 700 litres

5. **One million dripping taps could fill Sydney Harbour in 2 $\frac{1}{2}$ years.**

   true false

6. **Every Australian produces 20 000 litres of liquid waste per year - that's waste water full of grease, chemicals, and litter**

   true false

7. **Which Australian river was heavily polluted by blue-green algae in summer 91/92?**

   Murrumbidgee Darling Murray

8. **Blue-green algae can cause**

   colds cancer birth defects asthma liver damage

9. **How much of your body is made out of water?**

   50% 70% 90%

10. **How much water per day do you need to survive?**

    2.5 litres 20 litres 50 litres

11. **How much water is actually used by an average Australian per day?**

    100 litres 300 litres 500 litres

WATER QUIZ - SCRIPT FOR TAPE

The idea that the world can be out of water seems incredible. After all, 70% of the earth's surface is covered with water. But 98% of this water is salty, and can't be used for drinking or farming. Only 2% of the water on earth is fresh. Most of this water is in the form of ice. Water is a scarce and precious resource.

Australia, the driest continent on earth, has spent a huge amount of money on supplying its citizens with high quality drinking water - 80 billion dollars. Yet most of this water goes down the drain. 30% is used in washing clothes, and a fifth goes down shower grates and toilets. Only 10% of this water is used for drinking and cooking.

Of course, not all our water is used in homes and gardens. Much larger amounts are used to irrigate farmlands and do great damage to the environment. Large amounts are also used by industry, for cooling, cleaning, processing and removing waste. We usually don't think about the amount of water used in the production of everyday goods. Did you know that it takes 160 000 litres to make four tyres for your car, and about 700 litres to make a single newspaper?

But let's come back to the use of water in our home. Experts believe that we use up to 50% more water than we need to. We often waste water without thinking about it. When your kids play with the hose for five minutes on a hot day, 100 litres are down the drain. You don't care to repair your dripping tap? One million dripping taps could fill Sydney Harbour in only two and a half years.

When you use water, you also produce liquid waste, that's the water that goes down the sewer, full of grease, chemicals, and litter. Did you know that every Australian produces 70 000 litres of liquid waste per year?

A lot of this filthy water makes its way back into the waterways, through the sewerage and stormwater system. Water running off gardens and lawns, carrying fertilizer, chemicals, grease, litter and animal droppings can also pollute bushland and waterways. One of the dangerous substances in liquid waste is phosphorus. It is used in fertilizers, but also in laundry detergents and household cleaners. Phosphorus feeds the toxic blue-green algae. In the summer of 91/92, 1000 kilometres of the Darling River were polluted by slimy blue-green algae. They can cause birth defects, cancer and liver damage. There is a good chance that blue-green algae will affect YOUR local water ways as well. So - when YOU cut down on your waste water, you also help the environment.

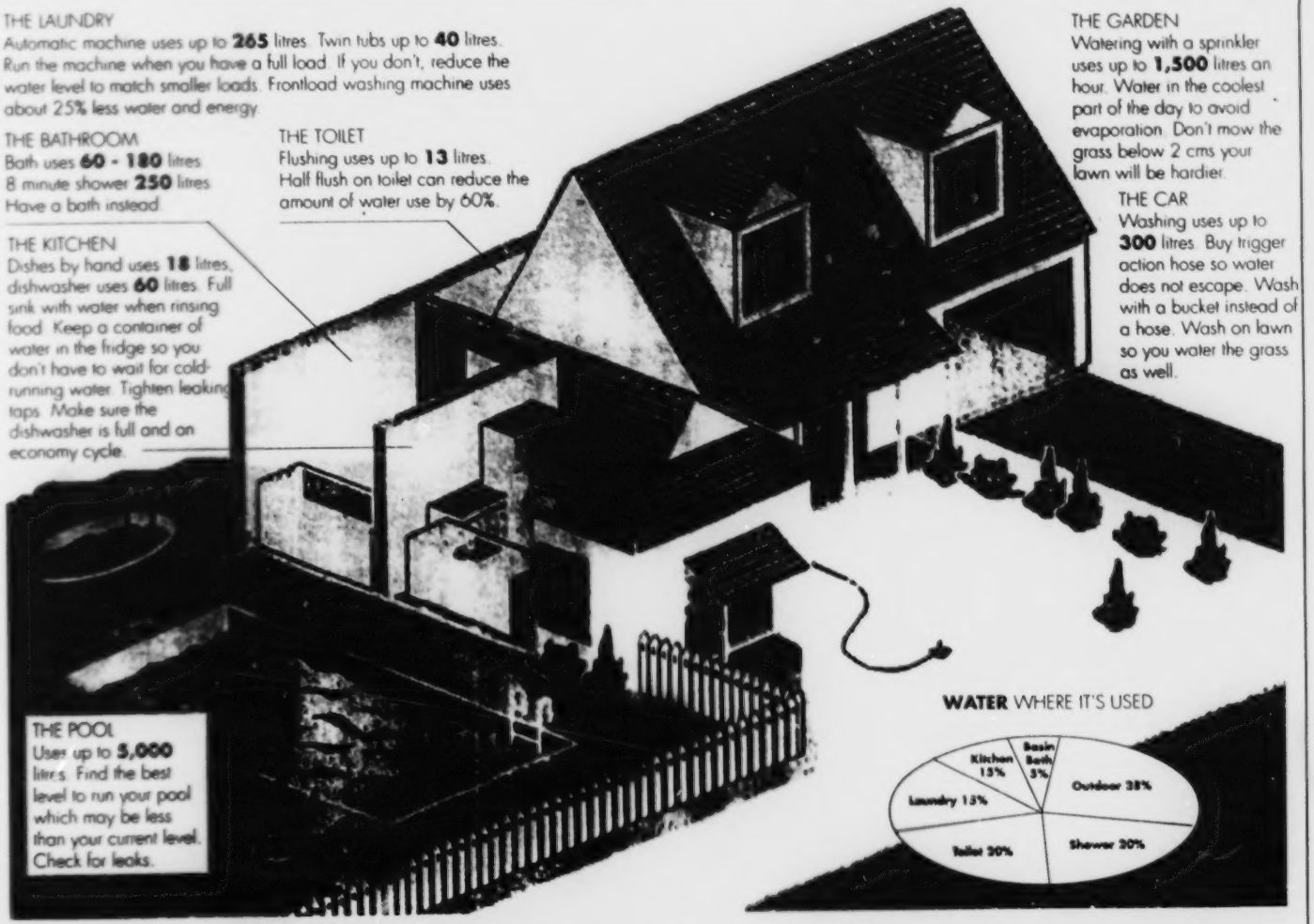
When people need more and more water, new dams have to be built. But dams cost the taxpayer money. Dams also change the river courses and destroy the natural environment. Deferring the need for a new dam is another good reason for saving water.

We can't live without water. 70% of our bodies are made out of water. It is surprising how little water we need to survive - only 2.4 litres per day. But the average Australian uses 300 litres per day.

Can we really afford to waste our water?

SMH 1/10/94

WATER USE DOWN, BUT A LONG WAY TO GO


THE LAUNDRY
Automatic machine uses up to **265** litres. Twin tubs up to **40** litres. Run the machine when you have a full load. If you don't, reduce the water level to match smaller loads. Frontload washing machine uses about 25% less water and energy.
THE BATHROOM
Bath uses **60 - 180** litres. 8 minute shower **250** litres. Have a bath instead.
THE TOILET
Flushing uses up to **13** litres. Half flush on toilet can reduce the amount of water use by 60%.
THE KITCHEN
Dishes by hand uses **18** litres, dishwasher uses **60** litres. Full sink with water when rinsing food. Keep a container of water in the fridge so you don't have to wait for cold-running water. Tighten leaking taps. Make sure the dishwasher is full and on economy cycle.
THE GARDEN
Watering with a sprinkler uses up to **1,500** litres an hour. Water in the coolest part of the day to avoid evaporation. Don't mow the grass below 2 cms your lawn will be hardier.
THE CAR
Washing uses up to **300** litres. Buy trigger action hose so water does not escape. Wash with a bucket instead of a hose. Wash on lawn so you water the grass as well.
THE POOL
User up to **5,000** litres. Find the best level to run your pool which may be less than your current level. Check for leaks.
WATER WHERE IT'S USED
Kitchen 15%
Basin Bath 5%
Outdoor 28%
Laundry 15%
Toilet 20%
Shower 20%

BEST COPY AVAILABLE

Where	Water Wasters	Water Savers
garden & outdoors		
bathroom & toilet		
		Twin tub washing machine - 40l
	Dishwasher - 60l	

Find information on *Water Wasters* and *Water Savers* in the home and complete the table above.

Start with the graphic in the newspaper article (handout 2).

Concentrate on the most important information only - 2 or 3 points per box are enough.

Think: Where can YOU start to save water?

Write down two things you could do in your home:

Read the newspaper article (handout 5) and answer these questions:

1. What are the big three water wasters in the home?

2. We use more water than we need to. How much?

3. 'This year the Water Board delivered a double assault on consumption.'
   Can you explain how the Water Board attacked the consumers?

4. With its advertising campaign, the Water Board hopes to cut down water consumption. By how much?

5. When the article was written, the Water Board did not think of water restriction. Why not?

WATER USE DOWN, BUT A LONG WAY TO GO

By JULIE DELVECCHIO
and MIRIAM COSIC

Showers, toilets and gardens are the big three water wasters, according to Dr Peter White, consultant to the Nature Conservation Council of NSW's Water Conservation Project. Dishwashers come close behind.

It is also evident that our extra bathrooms, better kitchens, household sprinkler systems and the increase in the number of domestic swimming pools have dramatically increased water consumption in Sydney over the past 30 years. Yet conservation consciousness can save consumers money. A water-efficient shower rose which costs $40 to buy would pay for itself within six months, Dr White said. A dual-flush toilet would reduce water consumption by more than 60 per cent. A survey published by the consumer magazine *Choice* in 1991 showed that dishwashers varied widely in water consumption: a Simpson Quintet 860B used 8,600 litres year, when run once a day, for example, and a Vulcan Dishlex 500 Eco used 12,300.

"We use over 30 per cent, and possibly over 40 per cent, more water than we need to," Dr White said.

Residential use accounts for more than half of Sydney's water consumption. Use in and around homes jumped from 185 to 285 litres per person per-day between 1951 and 1980, thanks to the advent of sewerage and sophisticated whitegoods.

The good news is that the figures are falling again.

In 1970, according to Dr White, the average toilet used 11 litres a flush. Today, dual-flush systems have reduced that to four litres.

Front-loading washing machines - which typically use 90 litres a wash, compared with 140 for a top-loader - only account for 8 per cent of the market at the moment, but their popularity is rising.

This year the Water Board delivered a double assault on consumption. On January 1, it introduced a flat rate of 65c a kilolitre for water.

For the first time people paid in direct proportion to how much they used.

And since August 4, a $1.2 million advertising campaign in print and on radio has been reminding people to conserve, conserve, conserve.

"We did some market research before the campaign and people were saying, 'We know we have to conserve water, we just need to know how'," said Mr Colin Judge, a spokesman for the Water Board.

Mr Judge said people had responded magnificently to calls to conserve water for the use of firefighters during the bushfires last summer, and that had raised awareness considerably. "That brought to everybody's attention the value of water," he said.

The board is hoping the advertising campaign will help cut consumption by 15 per cent. "Consumption has been below average for this week and has been for the last month," Mr Judge said.

The board's target is to cut per capita consumption 20 per cent by 2005.

The board was not considering water restrictions, the usefulness of which was debatable.

"At the moment, we are seeking voluntary changes of habit and the chance of those becoming permanent- a cultural change," Mr Judge said.

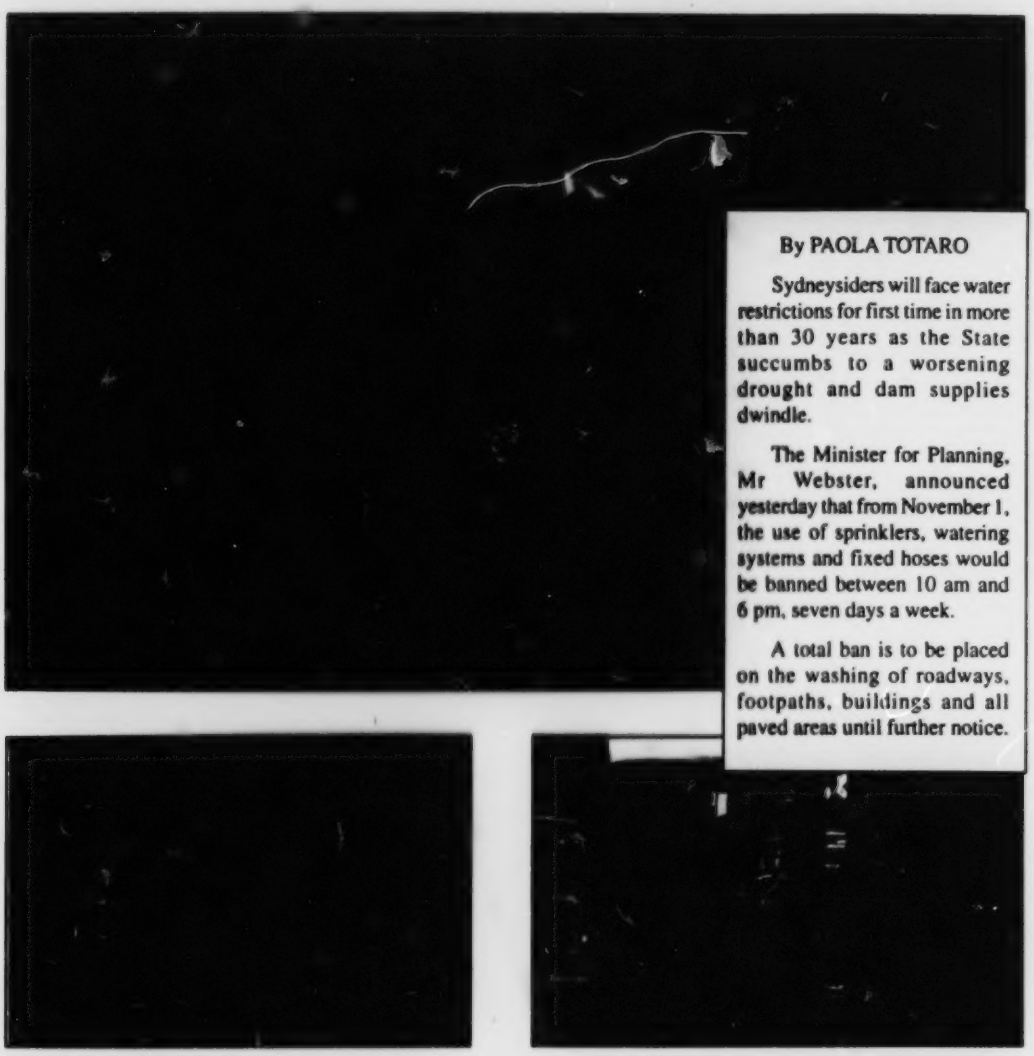
SMH 1/10/94

HELP THE JONES FAMILY TO BE WATERWISE!

They have: a big lawn, a pool, a car, a dishwasher,
a top-loading washing machine
and **a big water bill**

"Should I concrete my lawn and have my dunny down the back?"
"I would like to save, but I don't want to give up my lifestyle!"
"We LOVE water fights!"

HOUSEHOLDERS TO FACE BANS ON WATER USAGE



By PAOLA TOTARO

Sydneysiders will face water restrictions for first time in more than 30 years as the State succumbs to a worsening drought and dam supplies dwindle.

The Minister for Planning, Mr Webster, announced yesterday that from November 1, the use of sprinklers, watering systems and fixed hoses would be banned between 10 am and 6 pm, seven days a week.

A total ban is to be placed on the washing of roadways, footpaths, buildings and all paved areas until further notice.

Sorry, boys, the game's over ... Adam, 5, and brother Isaac, 3, will have to play elsewhere. The water truck, bottom left, may have to be redeployed, and hosing the footpath is out, too.

SMH 11/94

Your opinion: Do you support the government's decision?

Why? Why not?

Write a letter to the editor to express your opinion.

WRITING A LETTER TO THE EDITOR

Sender's address

Date

Receiver's address

Greeting

State your opinion (briefly)

Develop your argument. Give details, evidence, explanations. This could be more than one paragraph

Give recommendations

Closure

Signature

WORK OUT WHERE YOUR WATER GOES

	litres used		times per week	litres per week
Water in your garden				
Garden small sprinkler (one hr)	600	x	=	
medium sprinkler (one hr)	1,000	x	=	
large sprinkler (one hr)	1,500	x	=	
Hosing (one hr)	1,000	x	=	
Washing car	200	x	=	
Topping up your pool using hose (one hr)	1,500	x	=	_____
			Total =	
Water in your bathroom				
Toilet single flush	10	x	=	
dual flush half	5	x	=	
dual flush full	10	x	=	_____
			Total =	
Shower				
Eight minute ordinary shower rose	120	x	=	
Eight minute water-efficient shower rose	80	x	=	_____
			Total =	
Bath				
Half full	85	x	=	
Washing				
Hands, face	5	x	=	
Shaving	5	x	=	
Brushing teeth tap turned off	1	x	=	
tap turned on	6	x	=	_____
			Total =	
Water in your kitchen				
Washing dishes by hand (one meal)	20	x	=	
old dishwasher (one cycle)	45	x	=	
1990+ model (one cycle)	25	x	=	_____
			Total =	
Preparation				
Disposal unit (per use)	10	x	=	
Cooking, rinsing, drinking (per person per day)	10	x	=	_____
			Total =	
Water in your laundry				
Washing clothes front loading (one cycle)	120	x	=	
top loading (one cycle)	180	x	=	
Hand washing (per wash)	40	x	=	_____
			Total =	
		Household Total	=	

SECTION 2
GARDENS

Gardens... why and how?

LEARNING OUTCOMES

In the context of this study students will:

- set personal goals
- set literacy and numeracy goals
- gather information and mathematical data
- interact with others and in groups
- reflect on learning
- gather information and mathematical data from texts
- present information and mathematical data in texts
- use mathematics creatively
- use language creatively
- use technology
- solve problems
- increase confidence and participation
- make choices.

TOPICS

Language/Literacy

- group discussion & listening
- vocabulary
- opinion writing
- informal letter writing
- reading authentic texts
- descriptive writing
- summarising main idea

Numeracy

- metric measurement
- area
- perimeter
- scientific calculator
- scale
- budgets

RESOURCES

- handouts 1-12
- teachers notes 1-3
- listening text (or tape) and questions
- garden site or students' gardens at home

to be supplied by teacher:

- trundle wheel, measuring tapes, grid paper and rulers
- scientific calculators
- gardening books, seed & plant catalogues
- additional resources: pamphlets available from Greening Australia (02) 550 0720
- models of opinion writing and formal letters

FUTURE DIRECTIONS

	Activities	Resources	Assessment
	What's around?		
Introduction	• tour of local area to look at gardens	handout 1	completed observation sheet
	• discussion of gardens	teacher notes 1	
Language/ Literacy	• listen to tape/reading of text	teacher notes 2 handout 2	completed worksheet
	Why gardens?		
Language/ Literacy	• discuss benefits of gardens	handout 3	completed sheet
	• read article, *Bush Medicine*	handout 4	
	• develop vocabulary	handout 5	
	• understand the text	handout 6	
	• discuss & debate native plants vs introduced plants	refer to handout 2	oral presentation to group
	• read article *Desert yields new fruit sensation*	handout 7	
	• complete worksheet	handout 8	
	• write your opinion	handout 9	conference writing completed writing

	Activities	Resources	Assessment
	Planning a garden		
Language/ Literacy/ Numeracy	• inspect & assess possible local garden site	teacher notes 3, trundle wheel, tape measure	students compare & check measurements
	• discuss kinds of plants to use	gardening books, seed catalogues, magazines	
	• plan & cost a garden	handout 10	
	• list tools, plants & equipment needed	gardening books & catalogues	
	• evaluate suppliers		
	• draw to scale plan of proposed garden	grid paper rulers	
Numeracy	• calculate area	handout 11	discuss completed sheet
	Keep in touch...		
Language/ Literacy	• write a letter to a friend about the garden you've planned or visited	handout 12	completed letter
	Some issues to discuss include		
Reflection	• How have your ideas of what to include in an Australian garden changed?		
	• Has your interest in gardening changed? Why or why not?		
	• What other related topics would you like to know more about as a result of your study of gardens?		

The concept for this section was developed by Lynda Henderson, Maggie Sinclair and Leslie Stein.

OBSERVATION SHEET

Look at the garden and jot down some information:

Size of plot	
Kind of flora (note if native or introduced)	
Colour scheme	
Purpose of plants (shade, ornamental, food, wild life)	
Requirements of plants	
Maintenance	
Other decorations (gnomes, fountains)	

WHAT'S A GARDEN?

Here are some garden-related topics you may find interesting to discuss with your group. Select those that are appropriate, or choose others to suit the group.

- Many people have childhood memories of a garden. Discuss why/what people remember about gardens from their youth. If appropriate, discuss whether there are similarities/differences in gardens between different cultures.
- Gardens are planned areas, they don't just grow wildly in the bush. You may wish to discuss this in conjunction with Sally Morgan text (teacher notes 2).
- Australian gardens should have Australian natives only.
- People feel at home when they are surrounded by flowers that they are familiar with.
- There is no purpose to an ornamental garden - it's a waste of time, money and energy.
- Given the water shortages around the country, ornamental gardens should be discouraged.
- Gardens are good for your health - people feel better when they have access to gardens.
- Large cities should have garden areas which should be easily accessible.
- Artists often find inspiration in gardens. There are many gardens that have become familiar to us from paintings. Look at some such paintings, eg Monet.

LISTENING TEXT

This text can be taped or read by the teacher to the class:

Most of my happiest times were spent alone in the bush, watching the birds and animals. If you sat very quiet, they didn't notice you were there. There were rabbits, wallabies, goannas, lizards, even the tiny insects were interesting. I had such respect for their little lives that I'd feel terrible if I even trod on an ant. We'd come across all sorts of snakes, green ones, brown, black. Sometimes, the older boys used to kill the really big black snakes.

One day when I was on my own, I found some field mice under a rock near a honeysuckle vine. I often went to the vine, because the flowers were sweet to suck. It was almost as good as having a lolly. I thought the baby field mice were wonderful, they were pink and bald and very small. I decided it was a secret I'd keep to myself in case anyone harmed them.

As I sat looking at them, some boys suddenly appeared out of the bush nearby. When they saw what I was looking at, they ran over and pulled the mice out and held them high in the air, laughing and taunting me. They threw them to some kookaburras, who gobbled them up. I was really upset.

I had a crying tree in the bush. It was down near the creek, an old twisted peppermint tree. The limbs curved over to make a seat and its weeping leaves almost covered me. You didn't cry in front of anyone at the Home, it wasn't done. You had to find yourself a crying place. A lot of the kids cried in their beds every night, but it wasn't the same as having some place quiet to go where you could make as much noise as you liked.

I'd sit for hours under that peppermint tree, watching the water gurgle over the rocks and listening to the birds. After a while, the peace of that place would reach inside me and I wouldn't feel sad any more. Instead, I'd start counting the rainbow-coloured dragonflies that skimmed across the surface of the water. After that, I'd fall asleep. When I finally did walk back to the Home, I felt very content.

Morgan, S., 1990 *Mother & Daughter* Fremantle Arts Centre Press, Fremantle, pg. 96–97

LISTENING EXERCISE

Checking listening skills

1. List three kinds of animals Sally Morgan sometimes saw in the bush:

2. Why did Sally Morgan often go to the honeysuckle vine?

3. Why didn't Sally Morgan want anyone to know about the field mice she'd discovered?

4. What did some boys do to the field mice?

5. Describe Sally Morgan's crying tree.

6. Describe what happened to Sally Morgan after spending hours under the 'crying tree'.

WHY HAVE GARDENS????

In her article, **Bush Medicine**, gardener and journalist, Cheryl Maddocks, says this about gardening:

"The simple act of gardening has positive effects on stress levels and general health, and the very presence of plants can have physical and psychological benefits."

Before you read the article... Discuss with a partner what you think the benefits of gardening might be.

List what **you** think the health benefits of gardening might be.

Would the benefits be **psychological** or **physical**? Why?

What might be some disadvantages or dangers that arise from gardening? Discuss whether you think they'd be worth the risk.

Report your ideas and opinions to the class.

Bush Medicine

GARDENING WITH CHERYL MADDOCKS

Stress is a scourge of late Twentieth century life. As books and courses on relaxation and meditation multiply and health farms proliferate, there is new evidence emerging on a source of stress reduction which has long been recognised intuitively by gardeners. The simple act of gardening has positive effects on stress levels and general health, and the very presence of plants can have physical and psychological benefits. These benefits encompass positive outcomes in promoting healing, reducing grief, increasing physical fitness and ridding the atmosphere of pollutants.

The power of plants on people can be immense. In August 1994 I wrote an article about American landscape architect Topher Delaney which focused on the effects of particular plants on cancer patients. Delaney suffered from cancer and spent months receiving chemotherapy and radiotherapy at the Marin Cancer Institute. The waiting room looked out onto a bare courtyard and she desperately felt that, because the patients in the room were fighting for their lives, they needed some positive focus to strengthen their spirits. Delaney had a strong belief in the power of plants to heal, comfort, inspire, cheer and uplift and she was determined that, once healed, she would leave something positive behind for other patients.

Delaney and her partner built an atrium garden next to the waiting room. Now patients waiting for treatment may either look out onto the garden or enter it and listen to water as it flows through peaceful stone forms. They can gaze at the splendour of plants like digitalis, echinacea, violets and passion flowers. And the plants in the garden are used in healing. Delaney understood that plants with well-known healing qualities were therapeutic and inspirational. They created the desire to live. So when patients came to the clinic they received a small book containing photos of some of the plants in the garden and information about their healing qualities.

There is also evidence that gardening can be therapeutically valuable in particular circumstances, like coming to terms with grief or going through menopause. Germaine Greer in her book *The Change* points out that there are millions of women who discover gardening between the ages of 45 and 55. Greer feels that the enthusiasm for gardening is not motivated by boredom, but because the effect of gardening is like a "mental tonic". Greer claims that "a garden is a kinetic work of art, not an object but a process, open-ended, biodegradable, nurturant, like all women's artistry. A garden is the best alternative therapy."

Many people also find that the regenerative nature of gardening is very helpful when they are going through the grieving process. Directing their physical energies to planting new beds or redesigning an existing garden becomes a creative response to personal loss

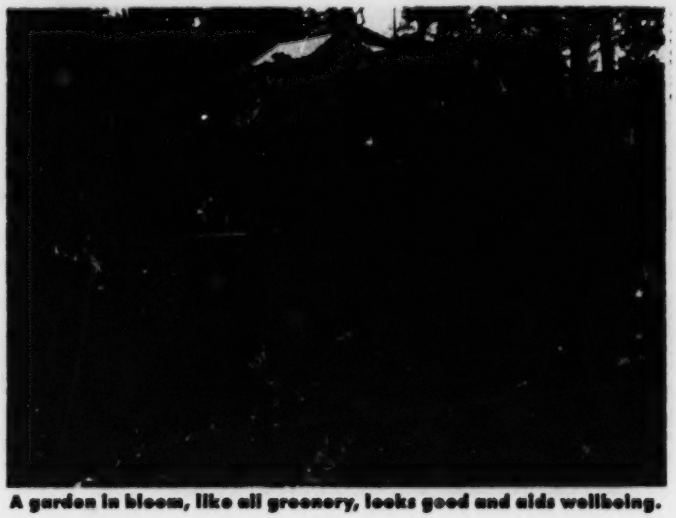
Other research carried out in the US shows there is growing evidence linking gardening to physical and psychological health. Barbara Ainsworth, Assistant Professor of Sports Science at the University of North Carolina, has found that gardening tasks like digging, raking and planting are the physical equivalent of sports like snorkelling, volleyball and brisk walking. More demanding tasks like mowing the lawn with a push mower, chopping wood, shovelling and tilling are on a par with fencing, downhill skiing, softball and doubles tennis.

The psychological aspects of gardening are also receiving attention. In the US an agreed stress measurement test (the Zuckerman Inventory of Personal Reactions) has been used in an attempt to determine whether green space in urban landscapes reduces stress. The researchers exposed volunteers to three types of scenery–countryside, urban with vegetation, and urban without vegetation–to find out the level of stress felt by people living in urban areas with little or no vegetation.

Results from the test showed that the urban group (without vegetation) demonstrated increased stress in four of the five "affect factors" (anger, sadness, positive effect and attentiveness). The countryside group showed reduced stress in three of the five affect factors. The group viewing urban areas with vegetation tended toward less stress in all five of the affect factors. And it was found that seeing vegetation in the urban environment had greater psychological impact upon the observer than viewing vegetation in the countryside.

Professor Margaret Burchett, from the Department of Environmental Biology and Horticulture at the University of Technology, Sydney, agrees that plants are a vital part of our urban landscape. She warns that as Australians become more urbanised, we risk becoming even more disconnected physically and psychologically from the vegetation that gives our planet life.

According to Burchett, "the psychological and social value of plants cannot be in doubt. People see them as producing a more beautiful and more desirable environment."



A garden in bloom, like all greenery, looks good and aids wellbeing.

It is not only in the garden that plants are helpful. An environmental scientist working with Nasa in the US has found that indoor plants such as the Boston fern *Ficus benjamina* and dracaena can remove 90 per cent of chemicals which commonly cause allergic reactions, such as benzene and formaldehyde, from the atmosphere. These chemicals are found in such materials as synthetic fabrics, carpeting and insulation. Because different plants absorb different pollutants, it is wise to have a variety of plants in the house.

C

The Australian Magazine 13–14/1/96

BEST COPY AVAILABLE

BUSH MEDICINE

Gardening with Cheryl Maddocks

What do you think the expression 'bush medicine' means? Discuss it with other students.

Have you had any experience with bush medicine? Jot down notes about your personal experience. Present your experience to the class.

Vocabulary: Find the following words in the text. Underline each one. If you're unsure of the meaning, try to work out the meaning from the article, then check with a classmate or look it up in the dictionary:

scourge
immense
therapeutic
inspiration
proliferate
intuitively
mental tonic
regenerative
vital
urbanised
synthetic
atrium
landscape architect

UNDERSTANDING THE TEXT

1. Cheryl Maddocks refers to an article she wrote in 1994 about landscape architect Topher Delaney.

   a. List three of the plants Delaney used in her garden:

   b. Why did Delaney also give patients a small book with photos of the plants?

   c. In your own words, briefly discuss how Delaney used plants to help her - and others - battle against cancer.

2. Two other particular circumstances- coming to terms with grief and menopause - were also mentioned in the article. In both these instances gardening has been found to be therapeutic.

   a. In a few sentences, summarise the findings of Germaine Greer on this subject.

   b. Explain the possible impact of gardening on people going through the grieving process.

3. Gardening is also being linked to physical health.

   a. Tasks like digging, raking and planting are the physical equivalent of _____ _____ , _____ and _____.

   b. Mowing with a push mower, shovelling, tilling and chopping wood are the physical equivalent of _____ , _____ and _____.

   c. How do you think researchers came to these conclusions?

4. A study has been conducted to find out the connection between stress and vegetation .

   Three groups were looked at:

   urban group without vegetation

   countryside

   urban with vegetation

   Describe the findings of the study.

5. NASA in the US has found that the Boston fern, a popular indoor plant, can be good for the health of the inhabitants.

   a. Explain NASA's findings.

   b. Why is it considered wise to have a variety of house plants in a house?

6. Complete this table summarising the research done on the psychological and physical benefits of gardens:

researcher	topic	finding
		Gardening tasks can be equivalent to sports like fencing, snorkelling and doubles tennis.
	gardens and menopause	
NASA		
	effect of gardens upon cancer patients	
		vegetation in urban environments has greater psychological impact than vegetation in the countryside.

Desert yields new fruit sensation

By DAVID PASSEY
Rural Writer

It's blood red, it's Australian bush tucker and it may soon be the citrus fruit you reach for to garnish cocktails, squeeze over seafood or make into a psychedelic summer drink.

CSIRO scientists have released, for commercial development, a new citrus fruit that blends the genes of a wild, native lime from the desert with those of a common mandarin.

No-one is sure what to call it - perhaps the Blood Lime or the Red Ochre Citrus - but already European chefs say the unusual fruit will add an exciting dimension to international cuisine.

According to Mr Andrew Beal, of Australian Native Produce Industries the company that expects to have commercial quantities of the fruit in 18 months, the "blood lime" was among the most exciting developments in bush tucker to date.

"French chefs who have tasted the fruit describe finding the new flavours as the culinary equivalent to a graphic artist discovering a new palette of colours to work with."

The fruit is one of four limes from the desert, two pure Australian fruits and two hybrids, that the CSIRO has just put forward for commercial experimentation and development.

But the fruits, not identified until 1915 and largely forgotten until Dr Steve Sykes of the CSIRO began to experiment with them in 1989, have the potential to be much more than just a quirky culinary diversion.

Dr Sykes believes the essential oils from the fruits could make them ideal as a base for a sharp-scented cologne, or to flavour teas in the same way Earl Grey was created.

"The plants were collected for our stocks in the early 1980s, but no-one bothered much with them until the big interest in bush tucker took off late in the decade," Dr Sykes said.

"I began to experiment with them as an aside and suddenly I realised the unusual colours, shapes and flavours could make the fruit a creative addition to the citrus world."

Mr Beal said the lime's attractions were "its vibrant crimson colour and its sensational and quite unique flavour. It has a very clean citrus tang; it's a sharp, very busy taste."

Dr Steve Sykes of the CSIRO, with his hands full of the desert limes.

Mr Beal said that for the first time Australia, once known as "destination bland" in international food circles, was beginning to contribute significant new tastes to international cuisine.

"For the past 200 years our only contributions to cuisine have been the pavlova and peach Melba. Let's face it, they are very Western foods, in fact they are about as Australian as Mao Zedong's toothbrush."

The fruits are not just ripe for interesting marketing angles but are also a drought-resistant, salt-tolerant citrus that can withstand cold and heat. Although most Australians and the world, remain oblivious to desert limes, Aborigines and early settlers have long used them for making jams and cold drinks.

SMH 6/2/96

DESERT YIELDS NEW FRUIT SENSATION

Which fruits have CSIRO scientists crossed to create a new citrus fruit?

Which of the crossed fruits is indigenous to Australia?

According to the text what are some possible names for the new fruit?

When are commercial quantities of the fruit expected to be available?

Who began to experiment with the fruits in 1989?

What does the CSIRO scientist think the essential oils from the fruit could be used for?

According to this article when did the big interest in bush tucker begin?

List three unusual characteristics of these new fruits.

What have Aborigines long used desert limes for?

Why was Australia once known as "destination bland?"

Why do you think Australia can no longer be known as "destination bland"?

WHAT DO YOU THINK?

You've heard an excerpt from Sally Morgan's book about her experience in a native garden and read of the native citrus fruit that grows in the Australian deserts.

Some people think that Australian gardens should reflect the native flora of Australia. Others think that gardens should reflect people's past . For example, many European flowers thrive here and help make people feel 'at home.'

What do you think about the following topic?

We should only plant native trees and plants in our gardens.

First, list as many reasons as you can think of on both sides of the argument:

agree	disagree

Now, use your list to write your opinion as to whether we should or should not only plant natives in our gardens.

PLANNING A GARDEN

Inspect and assess possible sites for a local garden. This may include studying local maps, walking around the neighbourhood, and contacting local councils. You might find there is a student who would like his/her garden planned.

Encourage students to bring in gardening books and seed catalogues. You might arrange a visit to a local nursery to see what's available and what is recommended by the nursery workers.

Students should reflect on articles *Bush Medicine* and *Desert Yields New Fruit Sensation* as well as earlier discussions when deciding what to plant.

Encourage them to consider the garden throughout the year.

Think about when the flowers will bloom and when the fruits and vegetables will be in season.

They might also discuss colours, scents and heights of plants as well as how much time they want to spend maintaining the garden.

Use this table as a guide to list the things you'll need for the garden. You may need to create other tables.

Check prices and availability from at least two suppliers.

	supplier 1	supplier 2	selected supplier
tools			
plants			
other (could include soil, fertiliser, garden decorations…)			

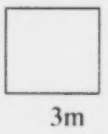
Which supplier(s) would you buy from?

Why?

CALCULATING AREA WITH A SCIENTIFIC CALCULATOR

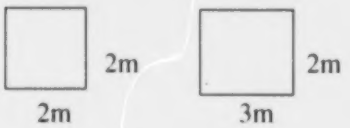
- recommended calculator: Casio fx 82.

1. For basic operations, use the scientific calculator as you would any other calculator

eg: 

$3 \times 2 = 6\ m^2$

2. If you want to find a combined answer from 2 problems:

eg: 

$(2 \times 2) + (3 \times 2) =$

Your calculator has bracket keys [( )]

open bracket *close bracket*

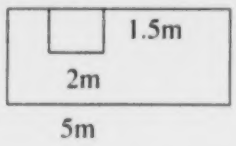
so the buttons you push on the calculator will be:

[(2 x 2)] + [(3 x 2)] =

Rule: For every symbol in the question, you must push a button on the calculator, in the same order as the question.

3. If you want to find an area with a piece missing

(eg: a window or door)

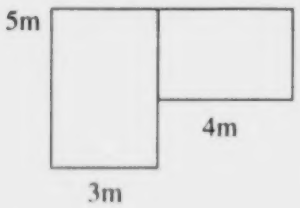
eg: 

$A = (5 \times 2.8) - (2 \times 1.5) =$

Calculator method:

[(] [5] [x] [2.8] [)] [−] [(] [2.1] [x] [1.5] [=]

4. For composite shapes such as a lounge/dining



Method A

$A = (5 \times 3) + (4 \times 3) =$

Calculator method:

[(] [5] [x] [3] [)] [+] [(] [2] [x] [4] [)] [=]

Method B

$(5 \times 7) - (2 \times 4) =$

Calculator method:

[(] [5] [x] [7] [)] [−] [(] [2] [x] [4] [)] [=]

Note: These methods and the rule also work for "Order of Operation" or BODMAS topics.

Now calculate the area of your garden using a scientific calculator.

WRITE A LETTER

Let your friends know about the garden you've been working on and invite them to come and see it…

Let them know something about the garden.

You might include:

- what you've planted
- what it looks like
- how you felt working on the project.

Invite them to come and see the garden.

Be sure to let them know:

- when to come
- where to come
- how to let you know whether they can make it (rsvp).

Make a draft first and work on it. Then write the final copy.

SECTION 3
REASONABLE FORCE

Reasonable Force... an argument

BEST COPY AVAILABLE

LEARNING OUTCOMES

In the context of this study students will:

- gather information and mathematical data
- interact with others and in groups
- reflect on learning
- perform procedures
- gather information and mathematical data
- present information and mathematical data in texts
- use mathematics creatively
- use language creatively
- use technology
- solve problems
- increase confidence and participation
- make choices.

TOPICS

Language/Literacy

- discussion
- genre - opinion writing
- critical literacy
- writing and editing

Numeracy

- survey
- graphs
- percentages
- critical numeracy

RESOURCES

- handouts 1–14

to be supplied by teacher:

- models of letters to the editor
- calculators
- protractors
- graph paper

FUTURE DIRECTIONS

- gun ownership
- martial arts
- self-defence strategies

	Activities	Resources	Assessment
Introduction	**What is self-defence?** • brainstorm what students know about gun laws and self-defence		participation in discussion
	• discuss cartoon	handouts 1,2	presentation to group
	• read article	handout 3	
	• complete worksheet	handout 4	completed worksheet
Numeracy	**What do people think?** • conduct class survey	handout 5	presentation of results to group
	• present results in graphs*	handouts 6,7,8,9,10	
	• analyse results		
Language/ Literacy	**What's your point of view?** • recount stories	refer back to handouts 1,3	
	• brainstorm arguments for and against the use of armed defence		
	• read models of opinions; take notes on main points	handouts 11,12,13; models of letters to the editor	present notes to whole group
	• plan and write opinion - first draft	handout 14	produce plan
	• write opinion	refer to model of opinion writing handout 15	conference with other students, check work, produce written opinion

	Activities	Resources	Assessment
Reflection	**Have you changed your mind about self-defence?** • did student's opinions change? Why/why not? • other methods of self-defence other than armed self-defence • why do we need to defend ourselves?		

additional activities

* Charts and Graphs: *Numeracy on the Line* Charts and Graphs, pp. 1–38.

The concept for this section was developed by Caroline Kane.

SMH 29/4/95

CARTOONS

Cartoons in newspapers often use a combination of words and pictures to draw attention to the main stories in the news. They often make their point through humour and through pointing out the irony within the stories.

In small groups discuss and make notes on the following points:

- the main message of the cartoon

- the images/ pictures

  How effective are they ?
  How do they make you feel ?

- the words

  How do they combine with the pictures ?
  What are they saying ?
  How are the words written and what effect does this have ?

- your overall impression

  Is it funny ?
  Does it make you smirk/ belly laugh/ chuckle?
  How do the ironies work ?

Present your findings to the rest of the group.

Man, 84, awaits fate on shooting

By ADAM HARVEY and AAP

Adelaide police and the South Australian Director of Public Prosecutions (DPP) were trying to decide yesterday whether to charge a "severely disabled" 84 year old man with killing an intruder who broke into his home early yesterday.

A 32-year-old man was shot dead about 12.15 am in Adelaide's north western suburb of Bowden after allegedly breaking into the premises.

Detective Inspector Rob Lean, of the South Australian police, said a report of the investigation would go to the DPP for assessment before the matter went any further.

Police said Mr Alby Geisler, a pensioner, lived alone in the house and had severe disabilities. Neighbours said yesterday that Mr Geisler was nearly completely deaf and that he had been a victim of crime recently - he had been bashed and his shed had been burnt down by vandals several weeks ago.

Last week, Queensland police decided against charging a Brisbane man, Mr Gregory Bateman, who shot and killed Matthew Easdale, 16, after Easdale crashed through a window of Mr Bateman's house, armed with a stick.

It appeared that Mr Geisler had been defending his home against the intruder, who was well inside the house when he was felled by one shot, police said. Mr Geisler was a registered firearms owner and a number of weapons had been found about the house, they said. A police spokesman said yesterday that there was no rush to decide whether Mr Geisler would be charged.

South Australian gun laws are similar to NSW's, in that people may keep a gun in their home only if they have a valid reason for using it, for instance, being a member of a gun club.

However, rifles kept in the home must be secured in a steel cabinet, a safe or locked to a gun rack. The ammunition and the bolt mechanism for the gun must be kept separately and a trigger lock must be fitted to the gun.

Under South Australia's criminal laws, a person does not commit an offence by using force if that person believes force is necessary and reasonable to defend themselves.

NSW residents may have a gun in the home only if they are a member of a gun club, a gun collector, a farmer, or they need the gun for work - for example, if they are a security guard or they cull animals as an occupation.

SMH 5/5/95

BEST COPY AVAILABLE

MAN, 84, AWAITS FATE ON SHOOTING

Read through the article and underline the main parts of the story so that you can explain exactly what happened.

Look for these words in the article, underline them and try to work out their meaning:

charge

Director of Public Prosecutions

intruders

breaking in

premises

victim

felled

registered firearm owners

weapons

rifles

ammunition

bolt mechanism

trigger lock

commit an offence

force

List all the words related to guns in the article.

List all the words related to the law in the article.

BALLOT SHEET

Ask at least 20 people the following question :

Is it OK to use guns to defend our homes from intruders?

Record their answers (using the tally method) below:

answer	tally	total
yes		
no		
don't know		

PRESENTING YOUR RESULTS

Is it OK to use guns to defend our homes from intruders?

Here is a a set of results from one survey of this question:

yes		5
no		3
don't know		2
	total	10

These results can be presented as :

- a bar graph
- a pie chart
- percentages.

BAR GRAPHS

Graphs have 2 axes:

- on the horizontal axis ‹———› we usually show what it is we are measuring or counting. In this case we are counting

YES NO and DON'T KNOW votes.

- on the vertical axis ↕ we usually show the results—in this case the number of votes.

Example

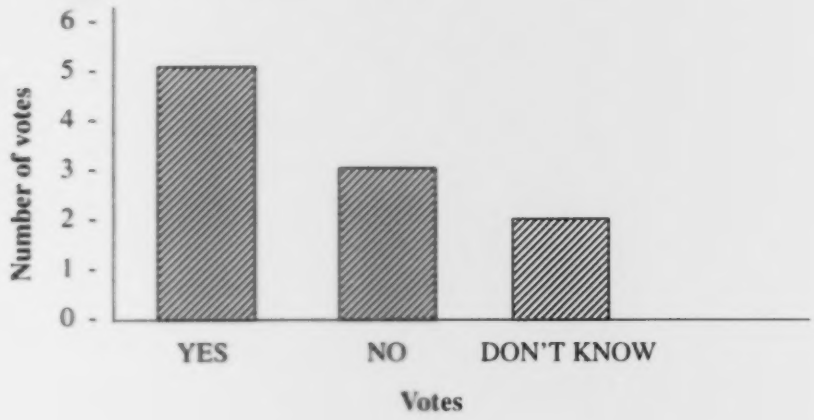
If the results of the vote are:

YES - 5 votes

NO - 3 votes

DON'T KNOW - 2 votes

The graph would look like this:



- Don't forget to label your axes
- Now design a graph for your results. You may want to use graph paper.

PIE CHARTS

Here is an example of how to design a pie chart.

There are 360° (degrees) in a circle.

divide 360 by the total number of students	answer = degrees for each student	multiply by the number of votes	results
total students 10 $\frac{360}{10}$	36° per student	5 **Yes** votes x 36° 3 **No** votes x 36° 2 **Don't know** votes x 36°	**Yes** 180° **No** 108° **Don't know** 72°
			These numbers should add to 360°

Using the blank circle (handout 9) and a protractor, measure the degrees and construct a pie chart.

Try this with your results:

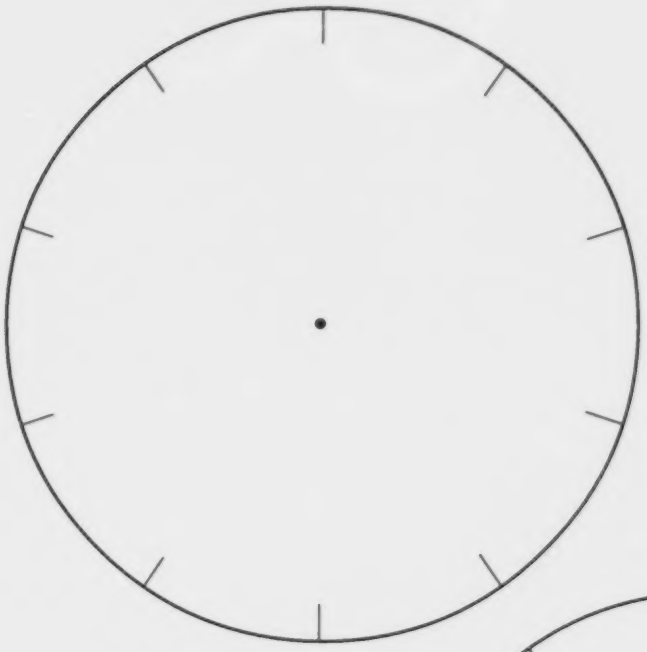
divide 360 by the total number of students	answer = degrees for each student	multiply by the number of votes	results
total students __ $\frac{360}{}$	__° per student	__ **Yes** votes x __° __ **No** votes x __° __ **Don't know** votes x __°	**Yes** __° **No** __° **Don't know** __°
			These numbers should add to 360°

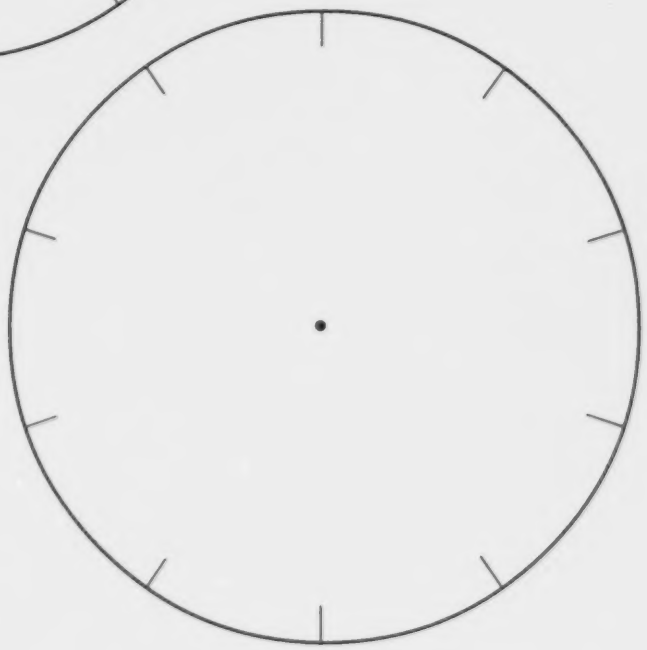
BEST COPY AVAILABLE

PIE CHARTS

Complete these pie charts with

- the results presented in handout 8
- your results





adapted from : Numeracy on the Line

PERCENTAGES

The results of your survey can be shown in fractions and can be changed into percentages (%).

Example: If the results are

YES	5
NO	3
DON'T KNOW	2
Total	10

they can be converted into fractions, decimals and percentages:

	fraction	same as	as a decimal	results in percentages %
YES	$\frac{5}{10}$	$5 \div 10$	0.5	50%
NO	$\frac{3}{10}$	$3 \div 10$	0.3	30%
DON'T KNOW	$\frac{2}{10}$	$2 \div 10$	0.2	20%

Explanation:

$\frac{5}{10}$ is the same as 5 divided by 10 [5 ÷ 10]

⇒ If this is done on a calculator we get 0.5 [5 ÷ 10 =]

To work this out as a percentage press the following keys on the calculator

[5] [÷] [10] [%]

This gives an answer of 50, which means 50%.

***Note**: on some calculators it is important NOT to press the = button before or after the % button. What does your calculator do?*

How would you do this calculation on a scientific calculator?

Your Results

Now use the table below to work out your results as percentages:

result as fraction	same as	as a decimal	result in percentages %

Coroner must decide in home invasion killings

By George Zdenkowski

Home invasion has provoked debate in two areas: punishment of offenders and the rights of householders to protect themselves against intruders.

The focus on the rights of householders to defend themselves has been prompted by two cases in which the authorities have declined to prosecute householders for their actions in shooting and killing intruders. In Brisbane, 16-year-old Matthew Easdale died when he was shot in the chest by Gregory Bateman. According to police, Bateman awoke to the sound of smashing glass and confronted Easdale, who was carrying a stick, in his living room. The single shot fired proved fatal.

A few days later, Alby Geisler, an 84-year-old man with severe disabilities, fired a single shot to kill a 32-year-old intruder who broke into his Adelaide home just after midnight. According to police reports, Geisler was a registered firearms owner and several weapons were found in his house.

The options available were to decline to prosecute or to charge Bateman and Geisler with murder or manslaughter. A decision not to prosecute has several advantages: it saves time, money and removes the uncertainty and anxiety involved in protracted court proceedings. On the other hand, it is a pre-emptive strike and may, in the view of some, usurp the jury function to assess the appropriateness of the killer's response to the situation confronting him or her. A decision to prosecute allows justice to be seen to be done, but it also entails costs, delay and considerable trauma.

Although the ultimate outcome was the same, the official responses in the two cases varied considerably. In Queensland, the police immediately announced that Bateman would not be charged. The Police Minister welcomed the decision and his counterpart accused the Police Commissioner of playing politics.

In South Australia, the response was more cautious. A report of the police investigation was referred to the Director of Public Prosecutions. A week later the DPP announced that he would not be prosecuting Geisler in view of his age and his belief that he was in danger. In the circumstances, the DPP had formed the opinion that there was no reasonable prospect for conviction.

The decisions prompted widespread debate, not only about the right of people to protect themselves in their homes, but also about the use of firearms.

Homicide victim support spokesperson, Ken Marslew said: "Shooting someone who invades your home should be the last resort. Otherwise we will end up like America ... the kid may have bolted, but you never know." (This raises the interesting issue of why neither Bateman nor Geisler fired a warning shot.)

Mike Ascher, president of the NSW Pistol Association, agreed that the American road of licensing firearms for personal protection was undesirable, but appeared to regard protection of house and family as a question of masculinity: "I would use whatever force was necessary and take the consequences afterwards ... Whether I would be legally entitled to do so or not would make no difference ... Anyone who is half a man would do the same."

Politicians also weighed in. The Federal Justice Minister, Duncan Kerr, emphasised the need to resist "right-wing rhetoric on law and order issues and gun ownership". The NSW Attorney-General, Jeff Shaw, stated that "reasonable force can be used by householders to deal with home invaders but not excessive force, and householders have to consider carefully the steps they take in those situations".

And this is a reasonable statement of the current law which occasionally got lost in the claims and counter-claims that followed these shootings. Strictly, a householder is only entitled to resort to lethal force when faced with a lethal threat. Lesser threats can be met with proportionally lesser responses.

But it is clear that courts and juries don't weigh the proportionality issue in finely calibrated scales. In the agony of the moment some latitude is allowed. The case law takes account of differences between attacker and defender in terms of age, size and gender.

The debate in NSW is given an edge because of the recent election to the Legislative Council of Shooters Party member, John Tingle. Following the Easdale shooting in Queensland, Tingle reportedly said, "It's time to put all potential intruders on notice that they leave their rights at the door when they invade someone's home". This may be a political aspiration but does not represent the current law.

The current law as to defence of self and others against intruders strikes a reasonable balance. The decision-making process as to prosecution of persons who kill or injure intruders should be impartial and rigorous. In appropriate cases, it is legitimate not to prosecute. However, the danger of injustice, or appearance of injustice, cannot be underestimated. (Consider the parallel situation of alleged killings in self-defence by police officers.) In the event of a death, the coroner should conduct an inquiry. Licensing of firearms is an invitation to greater violence.

These are the conclusions I trust will emerge from the Criminal Law Review Division of the Attorney-General's department in the report requested by the Attorney General, Jeff Shaw in the wake of these tragic shootings.

George Zdenkovski is an associate prefect of law at the University of NSW

SMH 1995

BEST COPY AVAILABLE

Stop shooting from the lip

It is strange how irrational most of the debate on guns and gun control tends to become. Guns have a power to evoke emotions an a scale which totally obscures any attempt to coolly discuss how much of a problem they represent, and what to do about it.

Take the case of the recent fatal shooting of a 16-year-old boy in Queensland. What if the householder, who awoke in the middle of the night to hear his door being smashed open and who picked up a rifle he had handy and shot the intruder, had not possessed a gun but instead had had an iron bar handy and had smashed in the boy's skull? That is, guns apart, how much violence is a householder entitled to use if his or her house is invaded? The law in Queensland, and it is much the same elsewhere, indicates reasonable force is permitted. The police in this situation are quite right in not recommending prosecution. But should the law be changed? That is, should there be some kind of code as to how much violence in self-defence or in apprehension of what an intruder intends, is allowed? How do you judge the circumstances?

Quite frankly, if someone smashed his way into my place in the middle of the night, I would be pretty frightened, and inclined to take as strong defensive measures as I could. You might well not be in a position or sufficiently calm to judge the appropriate degree of force, or willing to risk prior discussion - after all, your door has just been smashed down, and you have no idea of the identity of the intruder, his intentions, or what weapons he might be carrying.

But the problem is the gun. It is clear if a gun is the first weapon to hand, the use of it is overwhelming and possibly final, even if your initial apprehensions turn out to be mistaken. This alone suggests that there ought to be pretty strong disincentives for anyone to make a gun the first weapon of choice - for example, by making it illegal in any circumstances to use a gun in a house or built-up area unless there was a clear threat from another person pointing a gun. But what about a woman attacked by a large man intent on rape - should handguns be denied in all circumstances? Should other concealed weapons, including mace and similar sprays? Even so, it seems a pretty good general rule to prohibit the use of guns except for certain purposes which never exist in a city or a house. And certainly there is no justification at all for anyone possessing the kind of powerful assault weapons which have been used in some recent massacres.

However, it is clear that many on the anti-gun lobby want not only to prohibit the use of guns in other than special situations, but also to make the possession of and use of guns illegal in all circumstances - that is, no rabbit or duck shooting, no rifles kept on farms, and so on. Again, it is clear that if there is a gun on the premises, someone might be tempted to use it in moments of emotion, and this is more likely to involve a man terrorising a woman. Possible use of a gun for suicide is another matter, and no reason to ban guns although it is likely to be messy and perhaps unsuccessful.

There is a good case to be made for an absolute prohibition on the import of any guns other than small-calibre hunting rifles and shotguns, certainly all handguns, other than those for the use of police and security guards, again under strictly controlled conditions (which do not seem always to apply to the Victorian police force). But what are we going to do about all the existing weapons in the community?

A few years ago, the gun lobby was claiming that some 3 million households owned one or more guns. To make the possession of guns illegal might be a good start - but this would have to be done under State law, since the constitution might require compensation to be paid if the Commonwealth tried in effect to confiscate all existing legal guns. This would cost hundreds of millions of dollars and much litigation. But if all States made guns illegal, it would still leave a huge illegal armoury which would increasingly find its way into the hands of criminals.

And what about civil liberties? The gun lobby's claim that there is some kind right to bear arms is nonsense, and there is no real infringement of anyone's liberties in forbidding the possession of dangerous weapons. But the official civil liberties people who think that there is a civil liberties issue involved in the shooting of the 16-year-old are equally talking nonsense. An aggressor has no civil liberties vis-a-vis a person he is attacking, beyond the common law requirement that the defence not be excessively forceful in light of the attack. To punch someone who merely insults you is worse than to defend yourself against someone who punches you without provocation.

Really what is going on in Queensland is a political game. The Opposition is furious that the Goss Government might look more effective in populist "law and order" terms than it does, which seems unfair to the Opposition because it really means it. The civil liberties people are also talking about the law and order debate, and they are simply using the unfortunate death of the boy as a stick to beat Goss with to try to prevent him further outflanking the Opposition. But at least the Opposition is talking about a genuine concern, however misconceived, that there is a higher level of violence in our society these days.

The civil liberties gang (who are not consistent at all, but really these days just an anti-police lobby) cite dubious statistics, but make no attempt to come to grips with the genuine fears, however unfounded, of those in the community who respond to almost daily reports of homes robbed or invaded, and violence against the person. Perhaps this is the fault of the media, but does the fact that rape was once under-reported, and now may still be but less so, make the issue any less important?

But when we move to a greater degree of gun control, we had better face up to the issue of whether in fact we wish to prohibit guns and their use, or whether we want to limit the rights of individuals to take defensive action when they are threatened, attacked or invaded. That is, do we really think that criminals have rights such that a person may not defend himself without worrying about hurting the criminal?

There has for hundreds of years been the presumption that trespassers cannot be subjected to hazards such as mantraps, so clearly someone who is on another's premises is not totally without rights. Nevertheless, the law has always accepted that reasonable force in self-defence, which can include killing provided this is not the original intention, is acceptable. But the law has for some time now been taking a strange direction which assumes that a criminal is somehow protected from his victim. We see this frequently in the courts when the rights of the accused are given great prominence, and the rights of the victim are relegated to secondary consideration.

– Padraic P. McGuiness

SMH 29/4/95

SPECIAL REPORT

This article is a special report which contains someone's opinion.

Just by glancing at this article we can recognise what it is.

How do we know that it is one person's opinion?

How does this kind of article differ from an editorial?

Briefly, what is the general opinion of this report about gun laws?

What are the main points for and against gun laws made in this article?
Make notes in the table below:

for	against

BEST COPY AVAILABLE

IS ARMED SELF-DEFENCE GOING TOO FAR?

You have read a variety of articles in which different people have given their opinion on this subject. Now it's your turn. Begin to plan and draft your own argument for or against this question. Don't forget:

- to plan your work

- to use a strong introduction in which you:
  clearly state your point of view
  indicate some of the points which you will cover in your work

- to put each new point into a new paragraph and give examples to prove or justify your point

- use some of the points used by the opposite argument and show why they are wrong

- use linking words to help your work flow

- when you have written your first draft check through it yourself and check that:
  the points are made clearly
  all the relevant points are made
  each new point is in a new paragraph

- to get a friend to check through your work for meaning

- finally, to check spelling, grammar etc and write or type up your work neatly.

Guns should be banned

The debate about gun laws is a very serious one indeed. This is because human life is involved. Firstly, there is no excuse for ordinary citizens to have guns. Guns should only be for the army and the police. Secondly, guns cause more violence and death. The number of guns around forces normal people to get guns and guns are very often misused and kill the wrong people. Finally, instead of allowing more people to have guns we should look at what has gone wrong with society that people feel they need guns.

Guns cause more violence and death. The more guns that are in society the more people will have them for protection. Because of this people will begin to think that a gun will solve all their problems eg if they have an argument or if they feel threatened they will pull out a gun when in the past they would have talked it through. This will therefore cause more people to get hurt.

If you have a gun in your house it is more likely to be used on a member of your household than on a thug from outside. This can be through accidents, domestic violence, mistaken identity, etc. Therefore guns are often used to kill the wrong person.

The more guns that are around the more guns there will be. If your neighbours, family and friends all have guns you will feel that you have to have a gun. The more guns that there are in society the more people will get shot.

The real question we should ask ourselves is why there is so much violence in society? This is especially important to ask the media because they show and glorify the violence in society. Other questions should be asked: Why do people invade each other's homes? Why do youth choose violence to express their inner turmoil? Where do these young people get their examples or role models?

In the end guns are not the answer. Guns are the result of a society which has gone wrong, an irresponsible society. If we do not do something soon we will have to hear another mother's agony and pain for her dead child.

CAFE student

1995

SECTION 4
ABORIGINAL LAND

Aboriginal Land ... Mabo and Other Places

BEST COPY AVAILABLE

LEARNING OUTCOMES

In the context of this study students will:

- set personal goals
- set literacy and numeracy goals
- gather information and mathematical data
- interact with others and in groups
- reflect on learning
- perform procedures
- gather information and mathematical data from texts
- present information and mathematical data in texts
- use mathematics creatively
- use language creatively
- use technology
- solve problems
- increase confidence and participation
- make choices.

TOPICS

Language/Literacy

- vocabulary of maps and mapping including scales
- Aboriginal names
- Dreamtime stories
- read and construct texts related to maps and texts
- critical literacy

Numeracy

- map reading
- area estimation and measurement
- percentages
- critical numeracy related to maps, keys, alterations or adjustments of detail

RESOURCES

- teacher notes 1 - 5
- handouts 1 - 11

to be supplied by teacher:

- atlas
- road maps of South Australia (state motorists' associations have detailed maps available)

Optional Resources

ATSIC Aboriginal Australia Commonwealth of Australia ISBN 0644 251 1328
(available from post offices for $10.00)

Native Title Act, Information Kit on Native Title, produced by the Office of Public Affairs, Aboriginal and Torres Strait Islander Commission 1994. (available on request from ATSIC)

Australia Land Tenure Map from AUSLIG PO Box 2 ACT phone 06 201 420

FUTURE DIRECTIONS

- establish Aboriginal resource collection
- plan a trip to local Aboriginal sacred site

	Activities	Resources	Assessment
Introduction	**Mabo and Other Places** • brainstorm students' prior knowledge and issues that have affected students	teacher notes 1	participation in discussion
	• complete mindmap	handout 1	report to group oral presentation
Language/ Literacy/ Numeracy	**Mabo Australis** • interpretation of map • estimation • discuss vocabulary of key	teacher notes 2 handouts 2, 3, 4, 5	Calculator use* assumed knowledge of area and measurement**
	Land Use • critically analyse text, figures • rewrite	teacher notes 3 handout 6	
	Land Rights • scale • critical map comparison	teacher notes 4 handouts 7,8	read and analyse text
Language/ Literacy/ Numeracy	**Aboriginal Life** • discuss the Dreamtime • estimation • scale and problem solving • critical map comparison	teacher notes 5 handouts 9, 10, 11	
Reflection	• create Aboriginal resource collection		

additional activities

* Calculator Use: Maths a New Beginning pp EC 19-44

** Area Maths a New Beginning pp MM 1-11

The concept for this section was developed by Edd Ashmore.

MABO AND OTHER PLACES

Whole group discussion:

It may be useful to treat this session as one for accumulating student queries into a question bank, as much as for getting discussion underway.

Prompt Questions could include:

- What do you know about the High Court of Australia's Mabo decision?
- Where did you get your information – newspapers, television, books, radio programs, radio talkback programs, government-produced publicity, friends and workmates?
- How reliable do you think your source is?
- How are Australians generally affected by the High Court's Mabo decision – in your town, region, state, etc?
- What groups in Australia are particularly affected – householders, farmers, Aborigines, miners, big companies and corporations, graziers, migrant groups, workers, etc?
- Why do you need to know about the Mabo decision?
- Does it affect the way you think about land ownership in Australia? Why? How?
- Why do you think that the unit is called 'Mabo and Other Places'

Issues to do with the history of the Mabo decision, the politics of land rights, the colonisation of lands previously occupied, legal definitions such as 'terra nullius', etc, will almost certainly arise in this discussion. Teachers will have to make decisions through negotiation about the appropriateness of such discussion with the student group. One option may be to sideline many issues for later or parallel units of work so as to maintain impetus on the particular literacy/numeracy focus of this unit.

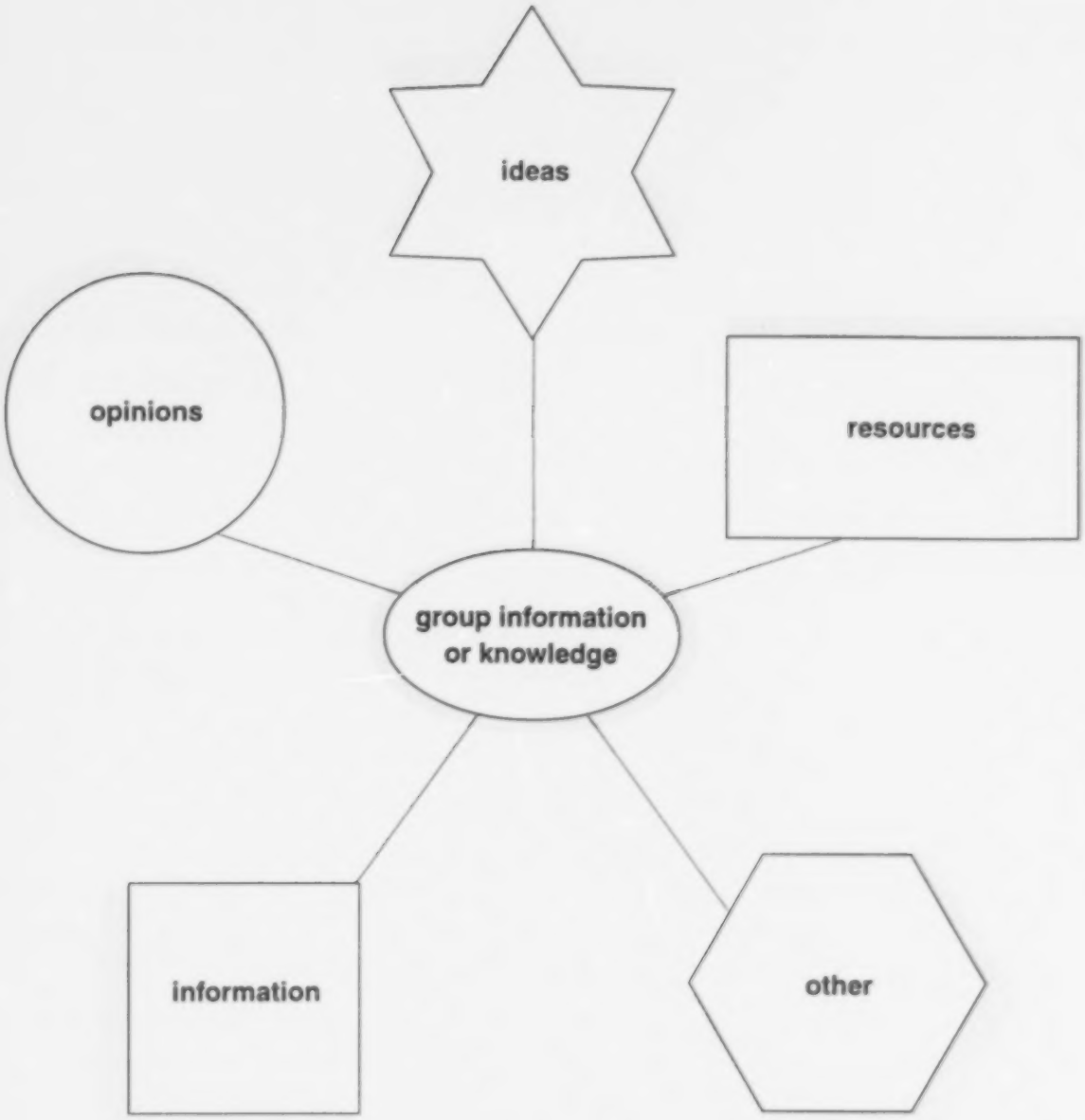
Small group discussion:

Each group to generate a bank of ideas, opinions, information, possible places for finding resources from classroom, library or personal collections, etc.

Record all ideas as in a brainstorm. Categorisation can be left until later if necessary.
See handout 1.

Assessment tasks:

- reporting of collected information to the whole group
- pooling and categorisation of resources
- reviewing collected information as a group in the context of the question bank established at the introductory discussion.


ideas
opinions
resources
group information or knowledge
information
other

MABO AUSTRALIS

Discuss land use with the students. Explain that the different shaded areas on the map represent different kinds of current land use (handout 2).

At this stage, use an OHT of the map only of "Mabo Australis" so that students can predict land usage. The key and the text will be introduced at a later stage (handout 4 and handout 6). The estimation exercises may be difficult to pursue effectively if students have access to all the information at once. See handout 3.

It may be useful to look at land usage in an atlas and compare this with the map on handout 2.

Estimation

1. Establish by discussion, questioning or student contributions, what would or might be an appropriate measure of area when talking about the entire continent.

   Incidental activities informing this discussion may be needed eg establishing that area is measured in square units – each side of the square being the same length. Introduce or review units of areal measurement e.g. square centimetre/cm^2, square metre/m^2, square kilometre/km^2 etc. Apart from some basic demonstration this activity would not need to be done in great detail.

   Discussion should quickly establish that it would be extremely difficult to estimate areas of different land use using any of the standard units of area.

2. Estimate fractional proportions referring to the land use areas shown on the map. These need only be very rough – more than half, less than half, more or less than a quarter etc.

   Incidental activities might include doing the same kind of fraction estimation using regular shapes (square, circle, triangle, rectangle). See handout 4.

3. Discussing the relative ease and difficulty of the tasks will lead into clarification of the reason for the difficulty ie the scattered, irregular shapes being looked at, the intermingling of different land uses in one general area, etc.

   Revise formulae for area of:

   - square $A = l \times w$ (Area is length times width)
   - rectangle $A = l \times w$
   - triangle $A = \frac{1}{2} b \times h$ (Area is half base times height)
   - circle $A = \pi r^2$ (Area is π times radius times radius)

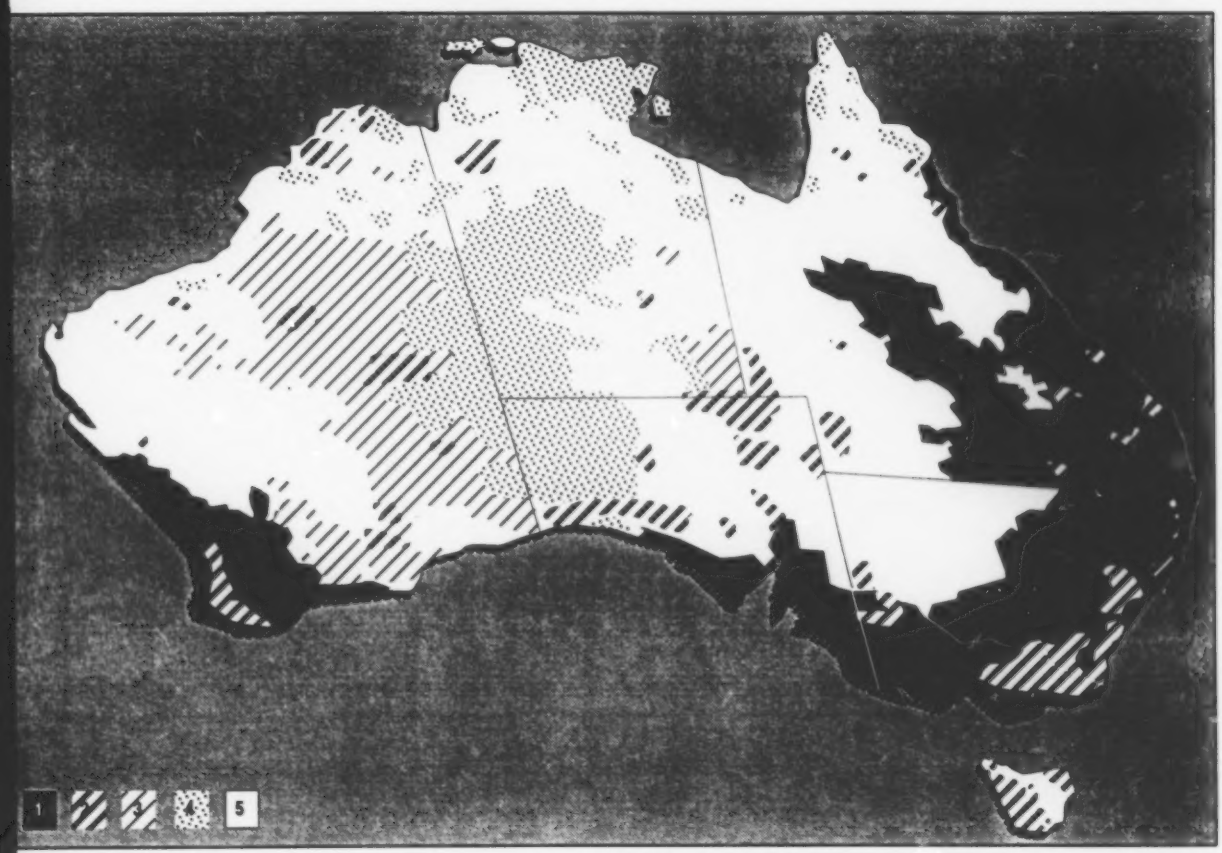
   [π can be taken as equal to 3.1416]

Assessment tasks could include:

- participation in discussion
- small group solving of problems
- using calculators to check estimation in groups/pairs/individually as appropriate
- identification and features of geometric shapes.
- using formulae to work out areas of regular shapes, irregular polygons etc.

MABO AUSTRALIS

This is the new map of Australia. Produced by the Australian Surveying and Land Information Group, the map is expected to become the point of reference for the ongoing debate over the High Court's Mabo decision. The map does not show which land could be subject of Mabo land claims but gives a picture of how the 7.6 million square kilometres of land in the continent is being used and by whom.



The Daily Telegraph Mirror, Thursday, September 2 1993 p.11

MABO AUSTRALIS

Discuss in your group the different shadings used in the map. Using your knowledge of the world to list the possible uses of the different areas.

List possible land use types:

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Now list the land use types shown in the key:

_____

_____

_____

_____

_____

_____

_____

How do these 2 lists compare ?

Why were there differences ?

MABO AUSTRALIS

This is the new map of Australia. Produced by the Australian Surveying and Land Information Group, the map is expected to become the point of reference for the ongoing debate over the High Court's Mabo decision. The map does not show which land could be subject of Mabo land claims but gives a picture of how the 7.6 million square kilometres of land in the continent is being used and by whom.

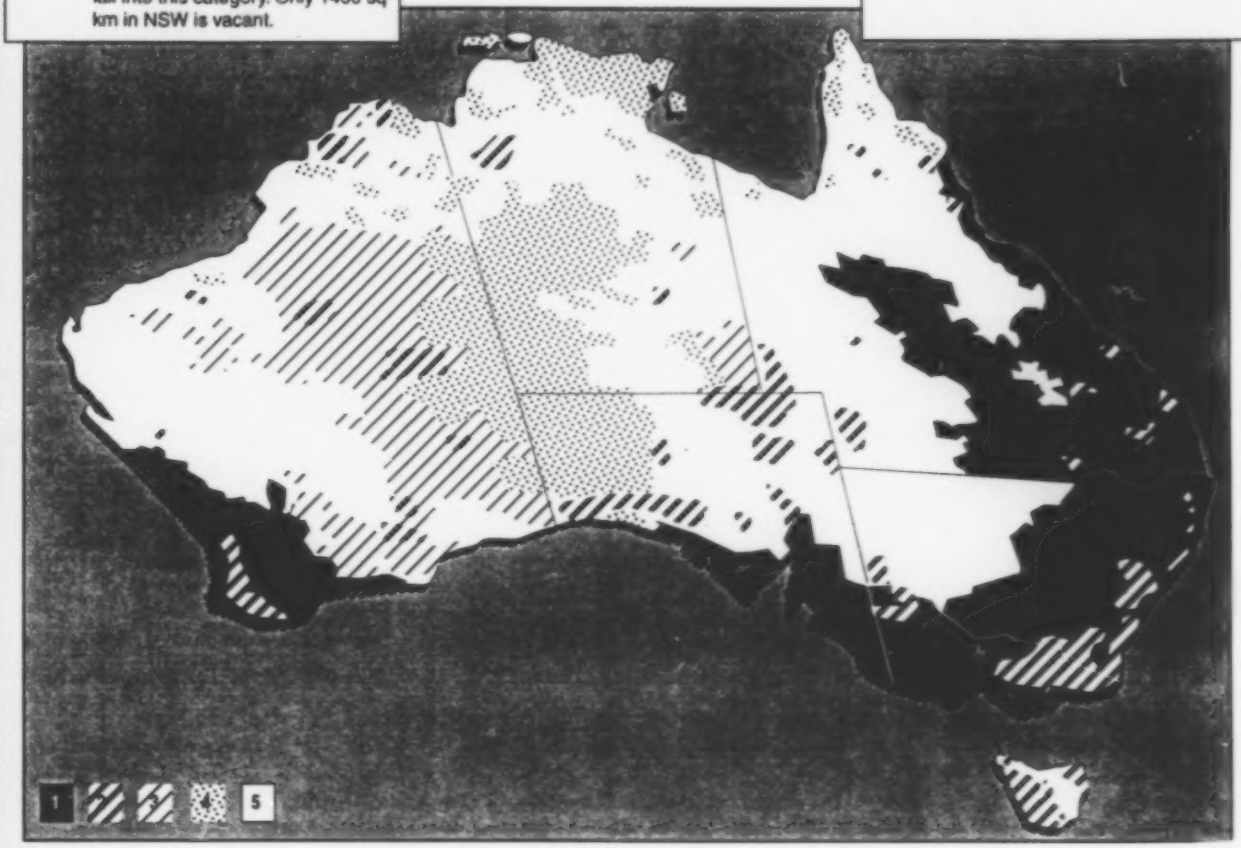
Forestry reserves and nature conservation reserves. Area used: 661,700 sq km. Percentage of Australia: 8,6% Forestry reserves are public land and managed by State forestry services. Nature conservation reserves include State recreation areas, conservation parks, environmental park, etc.

Vacant Crown land. Area: 961,000 sq km. Percentage of Australia: 12.5% this land, owned but used by the Crown, is most eligible for Mabo land claims. But the vast majority of this land is in West Australia where 863.5 sq km fall into this category. Only 1400 sq km in NSW is vacant.

Aboriginal land. Area: 1,093,000 sq km. percentage of Australia: 14.2% Land held by Aboriginal communities with special conditions attached to the titles.

Freehold. Area: 1,583,000 sq km. Percentage of Australia: 20.65% Land held by private residents.

Leasehold. Area: 3,233,000 sq km. Percentage of Australia: 42%. This land is also regarded as privately owned. Much of it is controlled by perpetual lease held by pastoralists.

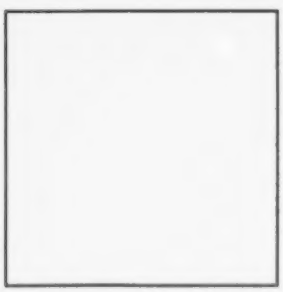


The Daily Telegraph Mirror, Thursday, September 2 1993 p.11

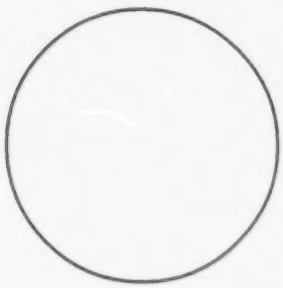
BEST COPY AVAILABLE

MABO AUSTRALIS

Name each of these regular shapes.

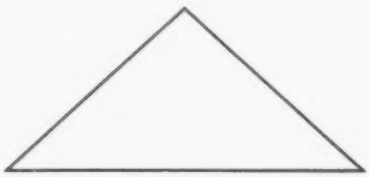


_____



_____

_____



_____

You have to work out the area of each of these shapes.

Which one do you think would be easiest? Why?

_____

_____

Which one do you think would be the most difficult? Why?

_____

_____

LAND USE

Prompt Question:

How can we establish some basis on which to discuss the land use of the whole continent?

Answer: The use of a key provided by the map-makers. There may need to be some discussion about the accuracy and/or reliability of the figures being used in a newspaper map which is "based on" a much more detailed map. Notions of critical literacy and numeracy may enter such a discussion.

Use an OHT and handouts of the map "Mabo Australis" with the key and text if appropriate (handouts 2,4; completed handout 3). Discussion and dictionary work on the vocabulary of the key.

Prompt Questions:

What is *crown land*?

How is *freehold* different from *leasehold*?

What is a square kilometre?

Do the square kilometre figures for each region total the 7.6 million square kilometres stated in the text?

Do the percentage areas total 100%?

Can you find any discrepancies in the overall figures?

Can the discrepancies be explained? How? (approximations, rounding off of numbers, etc)

Critical Numeracy

The figure for square kilometres of vacant crown land in Western Australia is apparently incorrect. How would you work out the correct area? Can it be done? Where might information be found to do this calculation?

Critical Literacy

The language in the key and the article's text (handout 6) can be examined for bias :

- In the introductory paragraph above the map it is described as "the new map of Australia". The use of the definite article 'the' could be critical for any further reading of the text. How does the meaning change if 'the' is replaced by 'a'?
- The first 3 paragraphs of the text talk about land being "safe from Mabo-style claims", being "most vulnerable" and being "most at risk". Whose values do you think this language is reflective of? Can other examples of possible bias be found?
- What are some other ways this information could be expressed? For example 'available' rather than 'at risk'?

- Rewrite the introductory paragraph/s to provide a bias which is positive for:
  Aboriginal people
  pastoralists on leasehold land
  the removal of any concerns about freehold land etc.
  The teacher should model a rewrite of this type.
- Are there discrepancies or variations in the different parts of the text?

Assessment tasks could include:

- problem solving of mathematical questions in small groups, pairs or individually, as appropriate
- production of rewritten sentences/paragraphs/introductions in small groups, pairs or individually.

MABO AUSTRALIS

THE vast majority of land in Australia will be safe from Mabo style claims, according to this new Federal Government map released yesterday.

The map outlining land ownership in Australia indicates about 12 per cent of all land is most vulnerable to Mabo style claims by Aborigines.

This land is vacant Crown land, the areas considered most at risk of successful Mabo claims. The map details private freehold, leasehold, Crown land, national parks, forests and Aboriginal lands in Australia.

If vacant Crown land is the area most likely to be subject to successful Mabo claims, NSW, Queensland and Victoria are the States with least to worry about.

These States have virtually no vacant Crown land. Western Australia has 90 per cent of the 12 per cent of Australia's vacant Crown land. South Australia has less than 1 per cent of vacant Crown land.

Other Crown land makes up 1 per cent of Queensland and it is so small in NSW and South Australia.

According to the High Court's Mabo decision last year recognising native title for Aborigines, not all Crown land can be claimed because the decision requires Aboriginals to show continuing links with the land.

The map – by the Australian Surveying and Land Information Group – shows about 20 per cent of Australia is freehold land and 41 per cent is leasehold land.

Across Australia, nature conservation parks make up 6 per cent, forestry 2 per cent and 14 per cent is already Aboriginal and Torres Strait Islander land.

More than 50 per cent of NSW is freehold land, compared with 36 per cent in Queensland, 16 per cent in South Australia and 40 per cent in Tasmania.

By STEPHANIE RAETHEL in Canberra

Vacant Crown land makes up less than 1 per cent of Queensland and NSW.

South Australia has the largest areas of parks and reserves, with about 20 per cent of the State.

Administrative Services Minister senator Bob McMullan, a member of the Government's Mabo subcommittee, said that while the map did not show where native title existed, its release should help to end confusion over the issue.

"In the short term, sometimes people peddling myths can prevail for a short time," he said.

"They can create fear and they can create a climate of antagonism and apprehension such that the facts are hidden behind a cloud of distortions.

'There has certainly been no shortage of attempts to create confusion ."

Senator McMullan said the map made it clear the overwhelming majority of the land where Australians lived and wanted secure titles was "absolutely secure" from any claims based on the High Court decision.

But Australian Mining Industry Council assistant director Geoffrey Ewing said Aboriginal people could assert native title over many different types of title and the Government must validate all titles.

He said Aboriginal people owned 14 per cent of land in Australia and the Government needed to look at what was an appropriate level of land owned by Aboriginals given their proportion in the population.

Daily Telegraph Mirror 2/9/93

LAND RIGHTS

Whole group discussion:

Use OHTs of Handout 8 (map of Northern Territory p. 14) and Handout 2 (the "Mabo Australis" map). The group will need to have handouts of both these maps. Timing of distribution will be individual.

Prompt Questions:

How do the areas of land under Aboriginal control in the Northern Territory match up with the Mabo Australis map?

What variations can be seen?

What are possible explanations for any variations?

The text associated with handout 7 is not obviously connected to the map. The map informs the text rather than the other way around. Try not to labour over the text.

Scale:

There are figures to be worked in handout 7. Estimations of percentage or fractional land areas in the Northern Territory could be discussed with reference to the "Mabo Australis" map. This would involve students in quite a lot of spatial comparisons. This could lead to activities on scale in maps.

None of the resource maps has a scale attached. Comparisons with maps of Australia and of the Northern territory in an atlas could lead to comparative measuring and perhaps an attempt to work out a scale for any or all of the maps in this section.

Critical Map Comparison:

A further set of comparisons can be made between handouts 7 and 8.

An examination of handout 8 should show up the direct relationship between the distribution of Aboriginal groups in the northern half of the Northern Territory and the areas of land which are held by them. In the northern part of the Northern Territory Aboriginal communities (handout 8) are largely located within land granted to Aborigines. Look at the cluster of communities in Arnhem Land. Name others in northern Northern Territory. This does not occur in the central and southern half of the Northern Territory. Questions about why this variation exists and what might happen under the Mabo legislation should arise fairly naturally from this discussion. That there are no obvious solutions to the problem provided within these resources leaves a possibility for many and varied solutions to be suggested by students working as a class, in small groups, in pairs or individually.

These maps provide opportunities for language work and discussion on and around the use of Aboriginal group and place names and their relationship to European place names eg Ayers Rock versus Uluru. Dreamtime stories, Aboriginal art from the various community groups working in the Northern Territory, the impact of tourism on traditional indigenous culture can all be discussed with reference to these resources.

Assessment tasks could include:

- describing and/or working out scales for maps
- using scale in an atlas to work out distances between different groups, the areas of tracts of Aboriginal land
- listing and comparing Aboriginal and European place names by finding and collecting information from these resources and atlases
- describing variations in the use made of natural resources at the Top End and in the Centre (both Aboriginal and non-Aboriginal resource exploitation could be discussed with comparison and contrast where appropriate).

Future Directions:

- working out a holiday schedule/itinerary for a visit to, eg Kakadu National Park/Uluru, using materials from eg tourist brochures/travel agents/the Northern Territory Tourism authority. (See the Unit of Work on planning an excursion in the CAFE Manual, Vol. 6, Teacher Resources for lots of activities.)
- costing an excursion to a local Aboriginal place of significance.

Land rights

The Aboriginal Land Rights (Northern Territory) Act was passed in 1976 by the Fraser Liberal-National Party Government. This Act resulted from the report of the Aboriginal Land Rights Commission headed by Mr Justice Woodward, in 1973-74, and from the previous Labor Government's Aboriginal Land (Northern Territory) Bill which only failed to become law because of the double dissolution of Parliament in 1975. The aims of land rights legislation, according to the Second Report of the Aboriginal Land Rights Commission, included:

- simple justice for people deprived of their land;
- the provision of a land base for an impoverished people who had no real opportunity to achieve economic equality with other Australians; and
- the maintenance and enhancement of Aboriginal people's sense of spiritual and cultural identity.

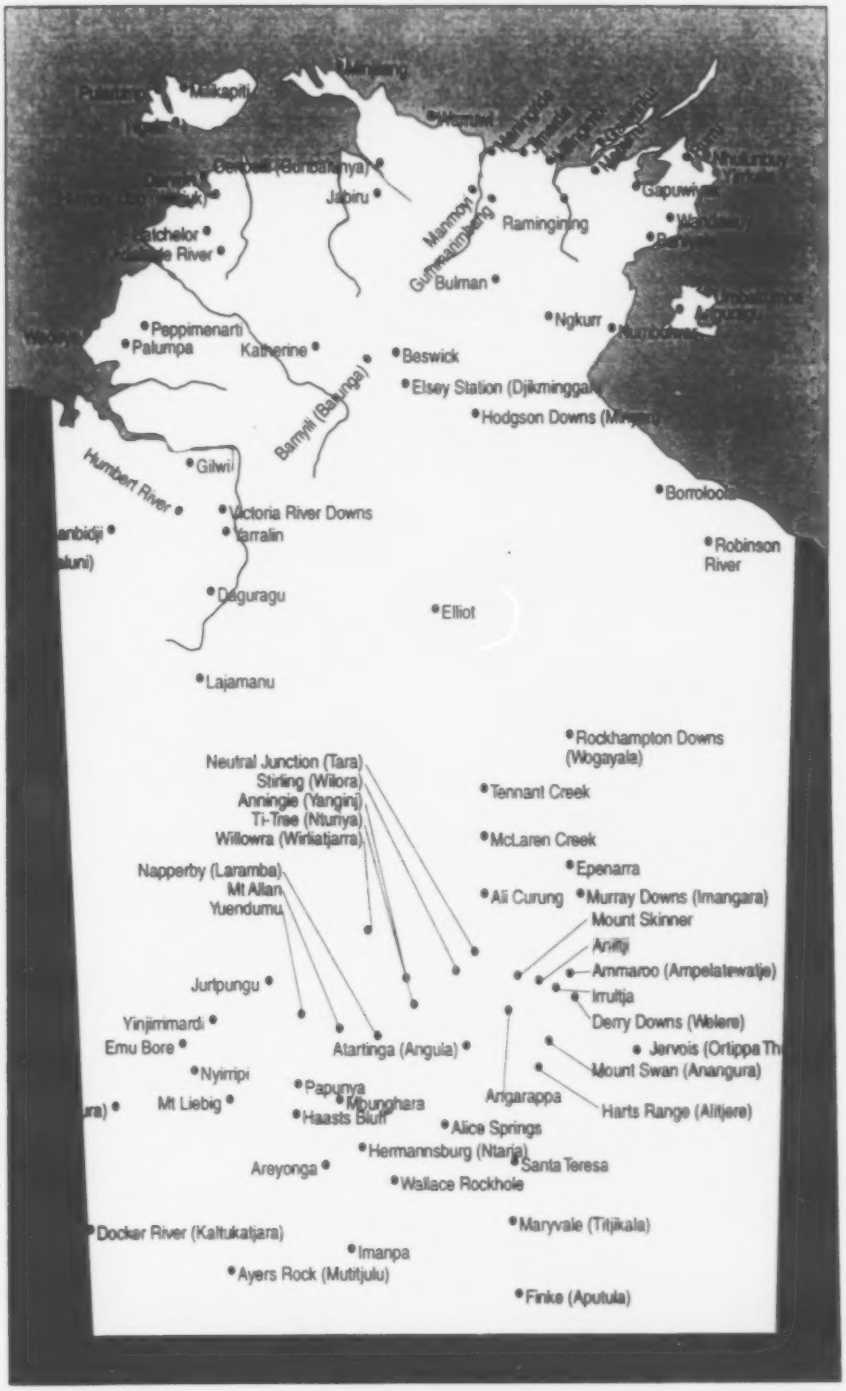
The Act gave Aboriginal people inalienable freehold title to all Aboriginal reserves (about 19 per cent of the Territory) and a mechanism whereby they could claim unalienated Crown land. Claims are heard by an Aboriginal Land Commissioner (currently a judge of the Federal Court) and claimants must be able to demonstrate traditional ownership of the land under claim. Aboriginal land owners are able to limit incursion on to their land for mineral exploration or commercial development. The Act also provides for the payment of 'royalty equivalents', amounts equivalent to the royalties received by the Commonwealth (with respect to uranium) or the Northern Territory Government (other minerals) from mining activities on Aboriginal land. These royalty equivalents are paid into the Aboriginals Benefit Trust Account (ABTA) and then used for two main purposes—to fund Aboriginal Land Councils (statutory authorities that administer Aboriginal land on behalf of traditional owners) and as compensation to Aboriginal people living in areas affected by mining. An all-Aboriginal Advisory Committee also makes recommendations on grants to Aboriginal communities in the Territory for a variety of economic, social and cultural purposes. These grants have to be approved by the Minister for Aboriginal and Torres Strait Islander Affairs. Under the Act at least 40 per cent of royalty equivalents are paid to Land Councils, 30 per cent to areas affected by mining, and up to 30 per cent to Aboriginal communities or incorporated bodies on the advice of the Advisory Committee.

Map 1
Land granted to Aboriginals under the Aboriginal Land Rights (Northern Territory) Act 1976. *as at 30 June 1992*

Land granted to Aboriginals Land Trusts under Schedules to the *Aboriginal Land Rights (Northern Territory) Act 1976*

Land other than Schedule land granted to Aboriginals Land Trusts before 30 June 1992

ATSIC *Aboriginal People of the Northern Territory* in Aboriginal People



Map 2
Aboriginals communities in the Northern Territory. Based on Aboriginal Land and Population map, 2nd edn. Department of Administrative Services, 1988

ATSIC *Aboriginal People of the Northern Territory* in Aboriginal People

BEST COPY AVAILABLE

ABORIGINAL LIFE

Prompt Questions:

Are there Aboriginal Dreamtime sites in the local area?

Are they marked and protected as the Kaurna people's story is in South Australia?

If there are no Dreamtime sites known, what reasons might there be for this?

How might the High Court's Mabo decision affect Aboriginal Dreamtime sites which either:

- exist and are generally known
- exist and are not public knowledge ie are only known to Aboriginal people from the area

  or
- are not currently known to exist but which may be discovered in the future eg by Aboriginal people researching their heritage or by archaeologists/anthropologists?

Small group work:

Refer to the map from Handout 9 and atlases, road maps of South Australia or other suitable resources and:

- estimate the distance travelled by Tjilbruke on the trail of his story
- locate the sites on a road map or atlas
- compare the current names used on the map with the site names in the language of the Kaurna people. Can you see any instances of similarities or differences which might be a result of Europeanisation of the Aboriginal name, mispronunciation of the Aboriginal name, spelling shifts, etc?
- discuss ways in which the location of springs named in the Dreamtime story might have been important to Aboriginal people eg seasonal movements in search of food.

Using scales provided on the maps try to work out the distance travelled by Tjilbruke.

Discuss ways of solving this problem.

Provide details of the method/s used by you or your group to work out the distances involved.

See handout 11.

Prompt Questions:

Use the map in handout 10 and any other resources to discuss:

- what are possible reasons for the variations in the size of the different group and culture regions in South Australia eg geographical (food and water supplies, etc), cultural (language differences, Dreamtime differences)?
- where can you find information about the different culture regions?
- are there similar variations in size in the Aboriginal groups' regions in your local area?
- what are the broad Aboriginal groups and regions of your state?
- are there any correlations you can find between region size, numbers of groups in a region, etc?
- are there any particular difficulties in getting local information?
- can you propose some possible reasons for the difficulties if they exist?

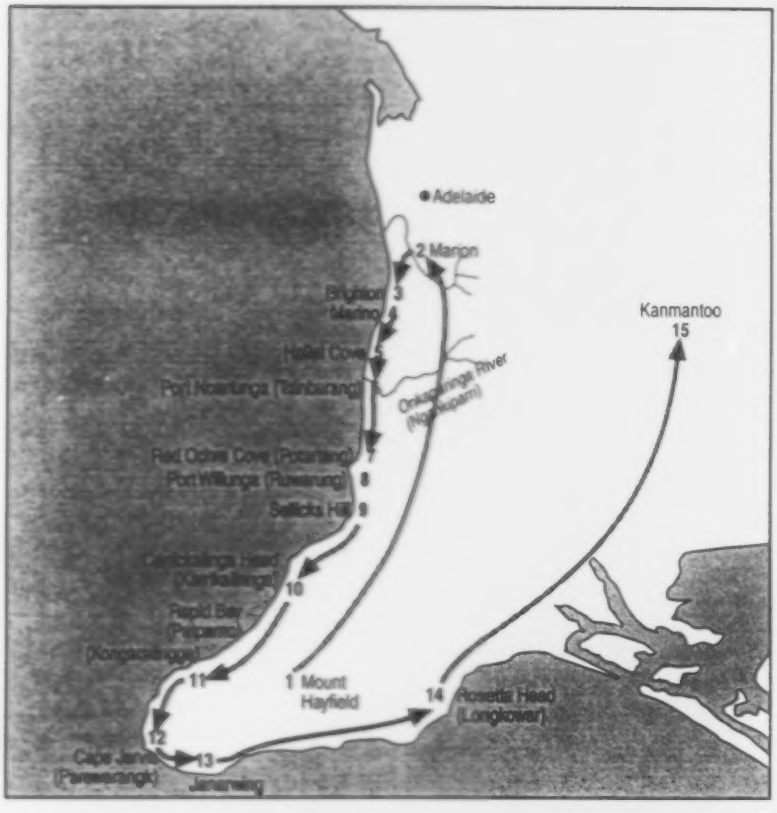
Assessment tasks could include:

- oral or written, individual or small group report to the whole group
- oral or written contribution to a group or individual completion of a problem solving methodology.

Future Directions

- contribution to development of a class, group or individual resource folder of Aboriginal Dreamtime stories
- contribution to or development of an Aboriginal resource collection relevant to the local area
- demonstration of an understanding of the use of scales on a map etc.

Aboriginal life



Map 2
The Dreaming of Tjilbruke: creation of the coastal springs

There is a memorial to the mythology of the Kaurna people at Kingston Park. It marks the area of one of the springs created in the Tjilbruke legend. The Tjilbruke Track Committee has marked all the remaining sites to Cape Jervis with cairns bearing the relevant part of the story.

1
Tjilbruke (pronounced chill-brook-ee) rose out of the ground near Mount Hayfield. One day he heard that his sister's son, Kulultuwi, had been killed near the Sturt River (Warri Parri) at Marion.

2
He travelled to Warri Parri where he discovered that the boy had been killed because he had broken a strict taboo forbidding him to kill emus.

3
The body of the young boy had been taken to Marion to be smoked and dried.

4
Tjilbruke then seized the body and took it to a spring on the beach at Marino where the smoking process was completed.

5
Tjilbruke took the body to a spot near Hallett Cove. He rested and was overcome with grief. His tears fell to the ground and a spring of water was created.

6
He continued on his sad journey but cried once again near Port Noarlunga (Tainbarang). Another spring was created.

7
At Red Ochre Cove (Potartang) he cried again and another spring appeared.

8
Tjilbruke then went on to a place a few hundred metres south of the old Port Willunga (Ruwarung) jetty. The tide was out so he sat down on the damp sand and cried, creating yet another spring.

9
He carried the body on to the beach near Sellicks Hill. Once again he cried, and a spring appeared in the sand.

10
A small swamp near Carrickalinga Head (Karikalingga) marks one of his resting places.

11
He then went on to Kongaratingga where there is a small cave in the hillside. Before reaching the cave he sat down and cried, creating another spring.

12
Tjilbruke continued on to Cape Jervis (Parewarangk).

13
From Cape Jervis he went on along the coast until he came to a cave called Janarwing. Here he deposited the body. Tjilbruke didn't emerge from the entrance of the cave —he came out of a crevice at the other end near Mount Hayfield.

14
Tjilbruke walked to Rosetta Head (Longkowar) and changed into a glossy ibis (Tjirrbruki).

15
His body became a rocky outcrop at Barukungga near Kanmantoo. This place was known as the place of hidden fire.

Aboriginal people had lived on the Adelaide Plains for many thousands of years before the arrival of white people. In 1836 the area was occupied by an Aboriginal group identified by anthropologists as the Kaurna (pronounced cow-r-na) people who possessed a distinctive culture and language. At this time their population was estimated at 300 individuals.

The Kaurna had an active ritual and religious life. The abundance of food and water in the area allowed large groups of people to gather for long periods to participate in ceremonies. The kuri dance and the palti dance are illustrated in watercolours by George French Angas. Regrettably, little of the rich Dreaming tradition of the Kaurna people has survived. The Dreaming of Tjilbruke is one of the few examples passed down to us. In 1986 a group of Kaurna descendants organised the marking of the sites related to this Dreaming. These sites form a trail along the coast south of Adelaide (see Map Z).

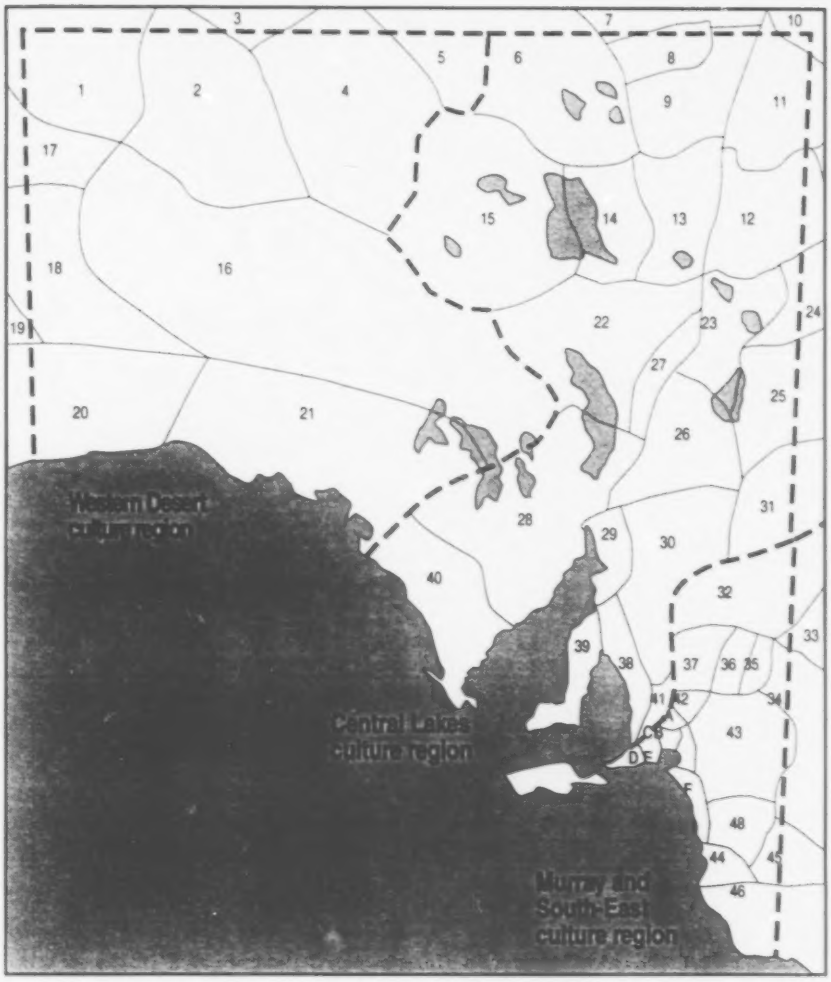
Early British observers were impressed by the excellent clothing worn by the Kaurna. In winter, possum-, wallaby- and kangaroo-skin rugs were worn as protection from the weather. The skins were prepared by pegging them out on claypans to dry. Ashes and sand were thrown on them to absorb the fat. The cloaks were elaborately incised on the inside. One well-known site for curing skins was the Aldinga Swamp.

Nets for fishing and trapping birds and larger game were widely used. For warfare the Kaurna had a variety of weapons. Shields, made from gum-tree bark and decorated with red and white pigments, were particularly distinctive.

Only a few Kaurna artefacts are held by the South Australian Museum due to the early destruction of Kaurna culture and the removal of the survivors to missions in other parts of the State. However, the Adelaide Plains still bear signs of Aboriginal occupation, although these sites are constantly under threat from vandalism and urban development.

ATSIC *Aboriginal People of South Australia* in Aboriginal People

BEST COPY AVAILABLE



Map 3
Aboriginal groups and culture regions in South Australia at the time of the arrival of Europeans

1 Pitjantjatjara
2 Jangkundjara
3 Matuntara
4 Antakirinja
5 Aranda, Lower Southern
6 Wongkanguru
7 Jeljendi
8 Karanguru
9 Ngameni
10 Karuwali
11 Jauraworka
12 Jandruwanta
13 Dieri
14 Tirari
15 Arabana
16 Kokata
17 Nakako
18 Ngalea
19 Pindiini
20 Miming
21 Wirangu
22 Kujani
23 Pilatapa
24 Wadikali
25 Ngurunta
26 Jadliaura
27 Adnyamathanha
28 Pangkala
29 Nukunu
30 Ngadjuri
31 Wiljakali
32 Danggali
33 Maraura
34 Ngintait
35 Erawirung
36 Ngawait
37 Ngaiawang
38 Kaurna
39 Narangga
40 Nauo
41 Peramangk
42 Nganguruku
43 Ngarkat
44 Meintangk
45 Marditjali
46 Bunganditj
47 Unoccupied
48 Potaruwutj

Ngarrindjeri
A Ngaralta
B Portaulun
C Warki
D Ramindjeri
E Jarildekald
F Tanganekald

ATSIC *Aboriginal People of South Australia* in Aboriginal People

BEST COPY AVAILABLE

ABORIGINAL LIFE

1. Find the area covered by the map in handout 9 in your road map or atlas. Make sure that it has a scale.

2. List any methods that you can use to estimate the distance travelled by the Tjilbruke on his Dreamtime journey. Use these methods and then write down your estimates.

method	estimated distance

3. List any methods that you can use to measure the distance travelled by the Tjilbruke on his Dreamtime journey. Use these methods and then write down your answers.

method	measured distance

Did you get different answers ?
Why ?

SECTION 5

WORK

Work ... what is it and who does it?

BEST COPY AVAILABLE

LEARNING OUTCOMES

In the context of this study students will:

- set literacy and numeracy goals
- gather information and mathematical data
- interact with others and in groups
- reflect on learning
- perform procedures
- gather information and mathematical data from texts
- present information and mathematical data in texts
- use mathematics creatively
- use language creatively
- use technology
- solve problems
- increase confidence and participation
- make choices.

TOPICS

Language/Literacy

- opinion writing
- questioning
- critical literacy

Numeracy

- percentages
- ratio
- tables
- scientific calculator
- critical numeracy

RESOURCES

- teacher notes 1–2
- handouts 1–13

to be supplied by teacher:

- scientific calculators

FUTURE DIRECTIONS

- Women in Australia ... a snapshot (section 6)
- Women in Management *Capitalising on Diversity* (handout 12)
- create own survey on women and work; Aboriginal and TSI and work; NESB people and work.

	Activities	Resources	Assessment
	Work in Australia		
Introduction	• brainstorm issues around work in Australia in small groups	teacher notes 1	
Language/ Literacy/ Numeracy	• guess facts about work in Australia	handout 1	
	• check answers	handout 2	read table
Numeracy	• calculate percentages*	handout 3	complete handout
	What is work?		
Language/ Literacy	• brainstorm issues: what is work? why do people work?	handout 4	participation in discussion
	• define employment in small groups***		
	• read and critically analyse definition of employment	handout 5	
	• construct a table of students' work and employment		
	House spouse		
	• discuss and list issues relating to unpaid work	handout 6	
	• complete handout	handout 7	

	Activities	Resources	Assessment
Language/ Literacy/ Numeracy	**Women and Work** • discuss issues relating to women's paticipation in the workforce • complete handouts • discuss issues relating to other under-represented groups eg Aboriginal and TSI	handouts 8, 9	participation in discussion completion of worksheet
Numeracy	**Ratio and Data** • use scientific calculator** • calculate ratios	handout 10	
Language/ Literacy	**Work and Diversity** • discuss issues raised in cartoon • read article • create your own survey	handout 11 handout 12 handout 13	
Reflection	**Some issues for discussion** • discuss issues raised • was there any conflict during this study? • what was the source of the conflict? • how was this resolved?	teacher notes 2	

additional activities

* percentages *Maths a New Beginning* pp FA 1–20
** calculator use *Maths a New Beginning* pp EC 19–44
*** Bee, B 1989 *Women and Work* pp 1–49

The concept for this section was developed by Sue Lord.

WORK IN AUSTRALIA

Issues that could be discussed:

full-time work

part-time work

shift work

overtime

salaried employment

waged employment

paid work

unpaid work

casual work

outwork

WORK IN AUSTRALIA QUIZ

Read the following questions and estimate the answers. You are not expected to know all of the answers. Discuss the questions with some other students.

1. What is Australia's population?

   15 m 16 m 16.5m 17 m 17.5m 18 m

2. How many of these people are 15 years and over?

   12m 13m 14m 15m 16m

3. How many people were working in Australia in July 1995?

   7m 8m 8.5m 9m 9.8m 10m

4. What percentage of people working in Australia in 1995 were :

   - male

     45% 47% 49% 51% 53% 55%

   - female

     45% 47% 49% 51% 53% 55%

5. What percentage of people unemployed in Australia in 1995 were:

   male_____ female_____

   born outside Australia_____ Aboriginal or Torres Strait Islander_____

6%	7%	8%	10%	12%	15%
20%	25%	30%	35%	40%	

Look at the tables in handout 2 and check your answers. You will need to find out about the population of Australia from somewhere else. Where can you check this figure?

Were your answers close to the correct answer?
Were you surprised by the correct answers?
Why/why not?

WORK FACTS AND FIGURES

Table 1. Civilian Population - July 1995

	males	females	married females
Civilian population age 15 years and over	6,962,000	7,178,500	4,186,500
Percent of total	49.23	50.77	29.61

Table 2. The Labour Force - July 1995

	males	females
Labour force	5,136,600	3,866,500
Percent of labour force	57	43
Participation rate	73.8	53.9
Participation rate persons born outside Australia	70.7	48.4
Unemployment rate	8.4	7.2
Unemployment rate persons born outside Australia	10.3	8.8

Table 3. Employment: Persons Full-tme and Part-time - July 1995

	males	female	married females
Number in employment	4,704,200	3,589,500	2,220,400
Percent of total empoyment	56.72	43.28	26.77
Number in full-time employment	4,204,500	2,064,900	1,202,700
Percent of full-time employment	67.06	32.94	19.18
Number in part time employment	499,700	1,524,400	1,017,800
Percent of part-time employment	24.69	75.31	50.28

Table 4. Unemployment: Number and rate - July 1995

	males no	males %	females no	females %
Total unemployed	423,400	60.94	277,200	39.06
Aged 15-19	76,300	54.73	63,100	45.27
Aged 20 and over	356,100	63.45	214,100	37.55
Looking for full-time work	383,100	66.06	196,800	33.94
Aged 15-19	50,400	58.40	35,900	41.60
Aged 20 and over	332,700	67.40	160,900	32.60
Looking for part-time work	49,300	38.01	80,400	61.99
Aged 15-19	26,000	48.87	27,200	51.13
Aged 20 and over	23,300	30.46	53,200	69.54

Women's Bureau, 1995 *Women and Work*, Vol 6, No 2. pp 12-13.

BEST COPY AVAILABLE

Table 5. Average Duration (weeks) of Unmeployment by Age - July 1995

age	males	females	persons
15-19	26,700	28,500	27,500
20-24	44,400	45,900	45,000
25-34	60,400	43,000	54,000
35-54	84,200	58,000	73,700
Total (includes 55 and over)	**62,100**	**46,700**	**56,100**

Table 6. Labour Force by Birthplace and Gender - July 1995

Country of birth	Labour Force		Participation Rate		Unemployment Rate	
	males	females	males	females	males	females
Born in Australia	3,383,200	2,995,200	76.1	57.1	7.8	6.7
Born outside Australia	1,304,600	871,300	70.7	48.4	10.2	8.8
Main English Speaking Countries	563,500	394,100	75.3	55.2	6.9	5.7
Other Countries	741,100	477,200	67.6	43.9	12.7	11.3
Oceania	138,600	98,400	85.8	62.4	9.0	7.9
New Zealand	110,100	75,300	86.4	63.7	8.1	6.8
Europe and former USSR	765,800	482,100	67.1	45.4	8.1	7.2
Germany	37,900	27,300	64.1	44.3	13.1	6.1
Greece	36,400	24,700	58.4	41.2	3.9	11.4
Italy	80,100	33,000	57.1	27.4	7.9	5.2
Netherlands	29,500	19,200	68.1	48.3	2.1	6.5
UK and Ireland	405,000	277,900	72.1	51.8	6.8	5.3
Former Yugoslav Republics	62,500	37,200	67.6	46.2	6.8	5.3
Middle East and North Africa	65,800	32,100	67.6	46.2	12.1	9.9
Lebanon	26,300	10,500	72.3	30.6	29.8	18.4
Southeast Asia	124,400	100,000	71.0	48.3	19.7	13.0
Malaysia	22,900	19,100	74.0	60.2	10.2	6.0
Philippines	14,000	26,400	68.0	54.6	6.3	5.9
Vietnam	53,300	25,200	75.8	39.6	31.0	25.4
Northeast Asia	64,300	49,600	66.9	47.8	8.9	8.0
China	32,700	23,000	74.2	51.4	11.3	6.6
The Americas	51,600	43,200	83.6	65.6	5.6	6.6
India	23,700	16,700	80.3	52.4	6.6	9.8
Other	93,900	66,000	81.8	58.6	11.0	10.6

Women's Bureau, 1995 *Women and Work*, Vol 6, No 2. pp 12-13.

Table 7. Aboriginal and Torres Strait Islanders Labour Force Status by Gender - 1994

Status	females	males
Employed		
Non-CDEP	28,400	20,000
CDEP	11,500	5,200
Total	**39,900**	**25,200**
Unemployed	24,100	16,100
Unemployment rate (%)	37.7	39,000
Total Labour Force	**64,000**	**41,300**
Not in labour force	24,600	51,700
Participation rate	72.3	44,400
Total	**88,500**	**92,900**

Table 8. Employed Persons by Occupation - May 1995

Occupation	females no	females % share
Managers and Administrators	216,700	24.59
Professionals	506,600	44.09
Para-professionals	223,100	47.79
Tradespersons	129,000	10.82
Clerks	1,062,900	78.86
Salespersons and personal service workers	898,800	64.70
Plant,machine operators and drivers	81,400	14.00
Labourers and related workers	439,200	35.93
Total	**3 557,700**	**43.22**

Women's Bureau, 1995 *Women and Work*, Vol 6, No 2. pp 12-13.

Table 9. Employed persons by Industry - May 1995

Industry	males	females	female %
Agriculture, forestry, fishing and hunting	269,300	126,500	31.96
Mining	78,300	10,600	11.92
Manufacturing	811,600	295,600	26.70
Electricity, gas and water	71,600	12,300	14.66
Construction	516,800	89,000	14.69
Wholesale trade	355,900	162,100	31.29
Retail trade	588,600	610,900	50.93
Accomodation, cafes and restaurants	176,900	217,000	55.09
Transport and storage	303,000	82,400	21.38
Communication	108,300	44,700	29.22
Finance and insurance	133,900	187,000	58.27
Property and business services	428,400	363,300	45.91
Government administration and defence	214,000	156,400	42.22
Education	196,300	382,200	66.07
Health and community services	177,500	569,100	76.23
Cultural and recreational services	98,700	95,000	49.04
Personal and other services	144,100	153,000	51.50
Total	**4,673,100**	**3,557,700**	**43.22**

Table 10. Higher Education Enrolments by Gender and Place of Birth

Country of Birth	male students	female students	females % share
Asia/Middle East	24,388	20,465	45.63
Europe	19,322	22,608	53.92
Africa	3,305	3,225	49.39
Americas	3,214	3,717	49.39
Carribean Islands	70	79	53.02
Atlantic Ocean Islands	8	16	66.67
Indian Ocean Islands	311	267	46.20
Not specified	3,444	2,927	45.94

Women's Bureau, 1995 *Women and Work*, Vol 6, No 2. pp 12-13.

PERCENTAGES AND THE SCIENTIFIC CALCULATOR

In the *Work - Facts and Figures* statistics 14,140,500 people were surveyed (see handout 2 table 1) and from that the percentage of males and females was calculated. Can you check that their calculations were correct?

Estimate the answers first, then use your calculator to check.

To use your scientific calculator, put in

a) [14,140,500] [x] [50.77] [shift] [%/=]

and you should get 7,179,131.85 (females)

b) [14,140,500] [x] [49.23] [shift] [%/=]

and you should get 6,961368.15 (males)

Why are these figures for females and males different from the figures in Table 1?

Activity 1- table 2 (handout 2)

Your total labour force is 9,003,100 people.

Find out how many females there are working if 43% of your total labour force is female.

Find out how many men there are working if 57% of your total labour force is male.

Find out how many women there are in Australia if the participation rate for women is 53.9%

That leaves 46.1% of women not in the work force. How many women is this?

Activity 2 - table 9 (handout 2)

In table 9 the percentage of females in each industry has been calculated. How do you think this was done?

If you said it was a four step process, you'd be right! Let's look at the fishing and agriculture industry as an example:

Step 1 identify number of females in industry

126,500

Step 2 calculate total number of people employed in industry by adding males and females

126,500 + 269,300

Step 3 calculate the fraction of women employed in industry out of the total population by dividing number of women by the total population in the industry

126,500 ÷ 395,800

Step 4 multiply the answer in step 3 by 100 to get 31.96% of females in the fishing and agriculture industry

or

when using a scientific calculator, press [shift] [%] [=]

RULE: Any fraction multiplied by 100 always gives a percentage answer.

To do this on the scientific calculator press:

[269,300] [+] [126,500] [=]

then

[126,500] [÷] [395,800] [x] [100] [=]

or

[126,500] [÷] [395,800] [shift] [%] [=]

To check your answer

[395,800] [x] [31.96] [shift] [%] [=]

should give you 126,500 (females)

Follow the 4 steps to find out the percentage of men in each industry.

Compare and write the ratio of men to women in each industry.

Was there a quicker way to find out the percentage of men in each industry? How would you do it?

Health and Community Services employ a lot of women.
What types of jobs would they include?
Why do you think so many women are attracted to the industry?

The Construction Industry has very few women. What types of jobs would they include?
Why are women not employed as much in this industry?

Activity 3 - table 8 (handout 2)

A total of 8,230,800 people were surveyed by Occupation. Can you work out how many men are in each occupation?

If there are 24.59% women as managers

Step 1 100 - 24.59 = 75.41% must be men.

Step 2 The actual number of the men would be

8,230,800	x	75.41	shift	% =

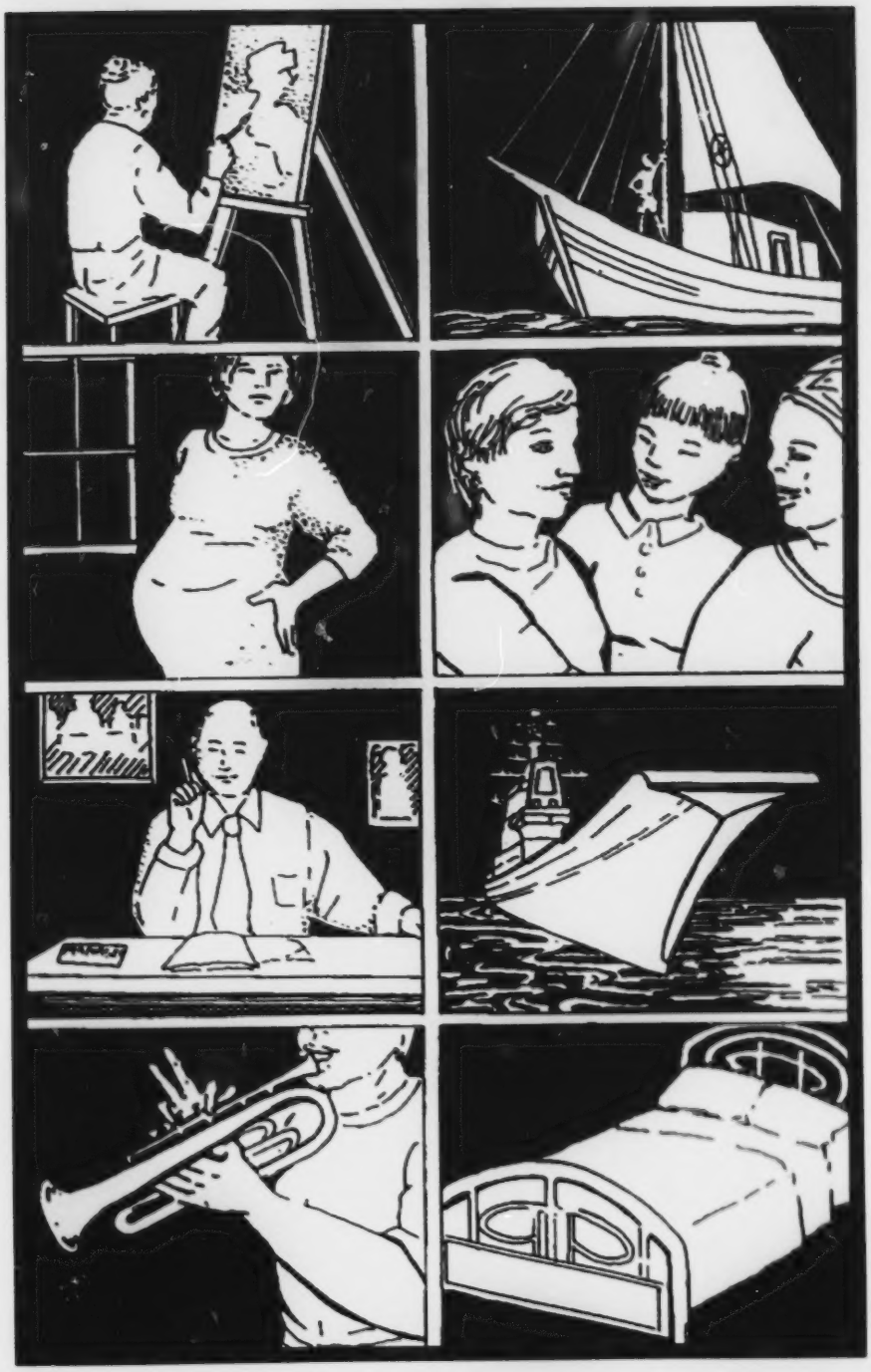
Using the 2 steps above, work out the number of men in each occupation.

Why aren't women attracted to the trades? Consider: years of training, hours of work, childcare, cleanliness, industry attitudes to women doing "men's work".

What attracts women to clerical work, sales and personal services? What would need to change to attract more men? Consider money, conditions, prestige, career path.

What do managers and administrators need to do to attract more women? Consider working hours, job sharing, childcare, flexibility, training - availability and styles of delivery, management styles - male v's female, "game playing".

WHAT IS WORK?



WHAT IS WORK?

Bee, B., (1989) *Women and Work*

WHAT IS WORK?

Labour Force Definitions

Employed: Persons aged 15 years and over who, during the reference week:

(a) worked for one hour or more for pay, profit, commission or payment in kind in a job or business or on a farm;

(b) worked for one hour or more without pay in a family business or on a farm;

(c) were employees who had a job but were not at work and were: on paid leave; on leave without pay for less than four weeks up to the end of the reference week; stood down without pay; on strike or locked out; on workers' compensation and expected to be returning to their job; or receiving wages or salary while undertaking full-time study;

or

(d) were employees, self-employed persons or unpaid family helpers who had a job, business or farm, but were not at work.

Employees: employed persons aged 15 and over who worked in their main job for an employer for wages or salary or in their own business (either with or without employees) if that business was a limited liability company.

Full-time workers : employed persons who usually worked 35 hours or more a week and others, who although usually working less than 35 hours a week, worked 35 hours or more during the reference week.

Part-time workers: employed persons who usually worked less than 35 hours a week and who did so during the reference week.

Women's Bureau, 1995 *Women and Work*, Vol 6, No 2.

HOW MUCH IS A HOUSE SPOUSE WORTH?

The Bureau of Statistics, which recently completed a survey on the subject of house spouses, says the average homemaker would earn about $400 a week if she, or he, were paid at award rates for jobs such as cleaning, cooking, childcare, bill paying, shopping and gardening.

But according to Professor Jacqueline Goodnow, who is completing a five-year study into household work, the bureau's figures are too low, both in terms of hours worked and the value placed on the job.

The bureau estimates that married women not in the labour force work an average of 95.5 unpaid hours a fortnight, which would attract about $8.68 an hour in the paid work force.

Unemployed males do 51.7 unpaid hours a fortnight, with an imputed value of $9.49 an hour.

"I think that's a rather low-level rate for what is often a management-level job," says Professor Goodnow from the School of Behavioural Sciences at Macquarie University. "I doubt whether that sort of money would even pay for a cleaner."

The bureau's estimates are very different from two earlier surveys carried out by a private researcher. Two years ago a national study by a firm of investment advisers put a price of $692 a week on a homemaker's head. Adjusted for inflation, that would now be just over $800 a week - or $41,800 a year.

A 1985 study by the Prudential Assurance Company estimated it would cost $34,000 a year to employ someone to do all the chores performed by the average housewife with small children. At today's rates that's equivalent to $47,000 a year, or $903 a week.

Dr Duncan Ironmonger, the director of the Institute for Applied Research on the Future at Melbourne University and editor of a book on household work, says it is widely recognised that unpaid housework would add an extra 60 per cent to the country's Gross Domestic Product if it were included in national economic statistics.

Extensive research also shows that we collectively devote about 217 million hours a week to paid work (70 per cent of which is done by men).

"Clearly the national statistics on which so many government and business decisions are based are all blatantly deficient. They're quite literally only showing half the story," Professor Ironmonger says.

Norrish, D. and Lord, S. (1989) *Undoing Some Maths Knots*

HOW MUCH IS A HOUSE SPOUSE WORTH?

1. Read the article *How much is a house spouse worth?* (handout 6).

2. Find these financial terms in the article and see if you can work out what they mean :

   • paid at award rates

   • an imputed value

   • adjusted for inflation

   • the country's Gross Domestic Product

3. Dr Ironmonger says:

   > *"Clearly the national statistics on which so many government and business decisions are based are all blatantly deficient. They're quite literally only showing half the story."*

   Talk about what you think this means.

   What is the other half of the story?

4. This article was written in 1989.

   What has changed since then?

WOMEN AND WORK

Discuss the following questions with other students and record your answers below.

1. What was the participation rate of women in the workforce in Australia in July 1995? The table on handout 2 will help you.

2. Do you think that this participation rate of women has always been the same?

   Why/why not?

3. Do you think that the participation rates of women in employment are the same for each industry?

   Why/ why not?

Look at handout 2, tables 8 and 9 and discuss 2 industries.

4. How do you think that the participation of women in the workforce in Australia compares to that rate in overseas countries?

   Why?

5. Look at the graph on handout 9.

   This shows the female share of the labour force 1970-1993 worldwide.

   From the graph fill in the table below.

Area	1970	1993
Sub-Sahara Africa		
East Asia Pacific		
South Asia		
Middle East/North Africa		
Latin America/Carribean		
High Income countries		

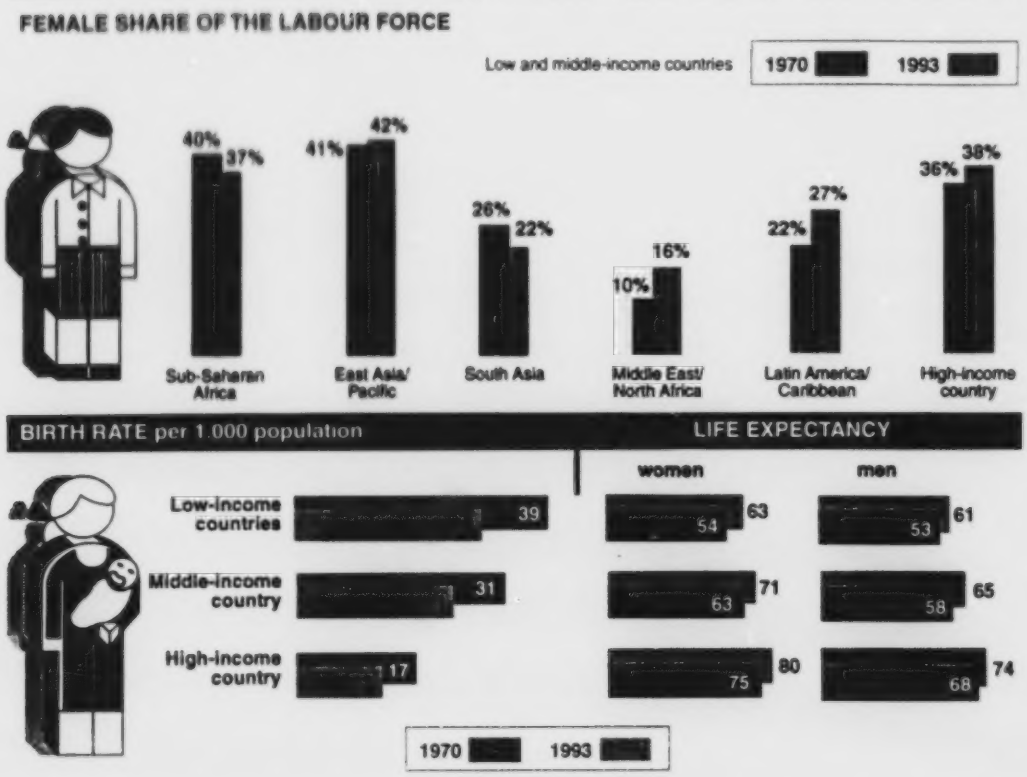
6. What do you notice?

7. Why would this happen?

   Look at the Birth Rate graph and the Life Expectancy graph and see if they give you some answers.

8. What is meant by 'High Income Countries'?

WOMEN AND WORK



WOMEN AND WORK

Ratio and Data Interpretation

* Use the "Work - Facts and Figures" (handout 2)

Ratio is the comparison of one thing to another eg. men compared to women, dollars to cents. Sometimes there are several things being compared eg. mixing cement

coarse aggregate		sand		cement
4	:	2	:	1

or baking a cake:

Flour		sugar		butter
2	:	3/4	:	1/2

1. Using the tables on handout 2, find the ratio of:

- males to females (table 1)

  What does this tell you about the population of women compared to men?

- men to married females? (table 1)

  What are some reasons why there are less married females than total number of females?

  If there are so many single women, why aren't all the men married?

  What do these figures **not** tell you?

2. Using table 2 on handout 2, complete the following table :

	males	females
(1) participation rates (line 3)		
(2) participation rates persons born outside Australia (line 4)		
(3) percentage difference between (1) and (2)		
(4) ratio (1) : (2)		

Who is included in the term 'participation rate'?

Why is there a percentage difference between the participation rate and the participation rate of persons born outside Australia?

What might have contributed to these percentage differences?

Compare the percentage difference of males to females. Why are they different?

What can be done to improve these differences?

3. Using table 6 (handout 2)

- Some ratios can be written simply eg 2 : 1. What is the simple ratio for the following:

  Australian females : New Zealand females

  Greek females : Italian females

  Greek males : Greek females

  Australian females : Australian males

  Females from India : Vietnam : China : Philippines

- Some ratios can be simplified eg. 3 : 6 can be simplified to 1 : 2. This can be done on the calculator by using the [ab/c] key as the ratio dots. So you would put in [3] [ab/c] [6] [=] and you will get

  [1 ⌟ 2] The [⌟] mark is the calculator's version of your ratio dots [:]

Use your calculator to simplify these:

i) 10 : 5

ii) 6 : 10

iii) 2 : 4

iv) 6 : 8

v) 4 : 8

vi) 10 : 15

vii) 10 : 20

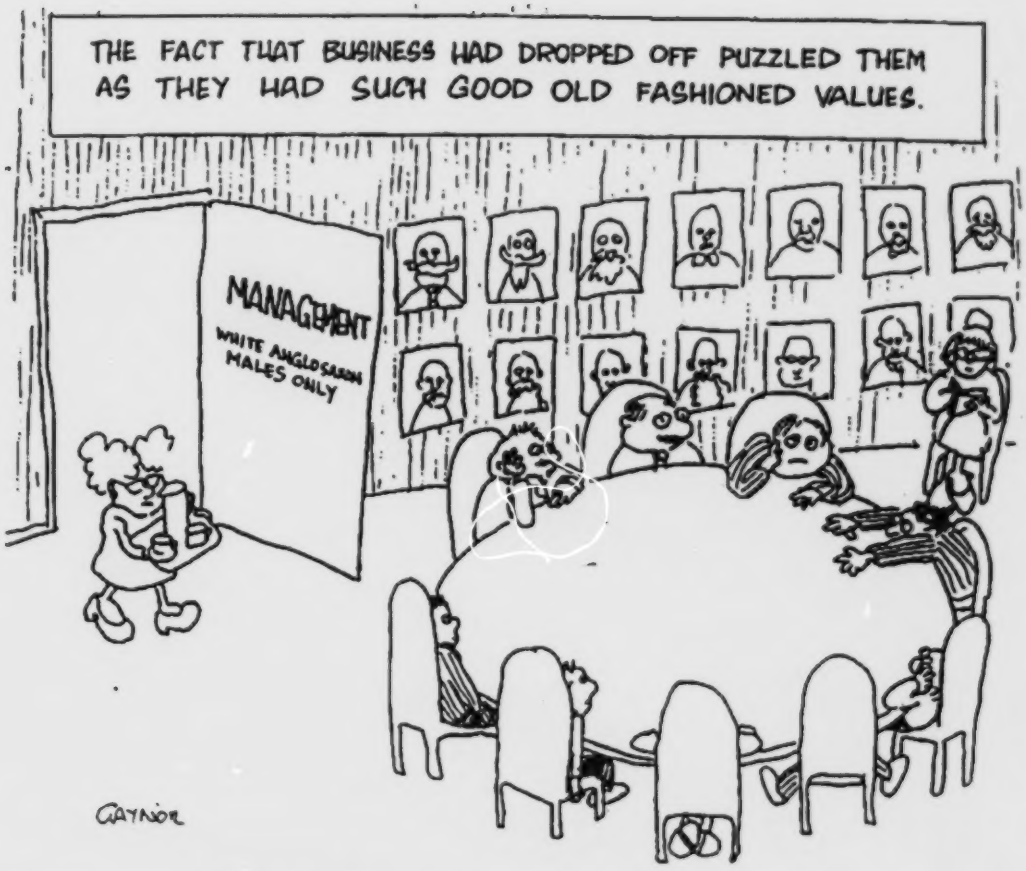
viii) 4 : 12

ix) 3 : 15

x) 4 : 12.

WORK AND DIVERSITY

Look at the cartoon below.
What is it saying?


THE FACT THAT BUSINESS HAD DROPPED OFF PUZZLED THEM AS THEY HAD SUCH GOOD OLD FASHIONED VALUES.
MANAGEMENT
WHITE ANGLOSAXON MALES ONLY
GAYNOR

Women's Bureau, 1995 *Women and Work*, Vol 6, No 2.

The cartoon came from an article that had the heading 'Capitalising on Diversity'.
What do you think is meant by this?

ENTERPRISING NATION:
Capitalising on Diversity

The Task Force is convinced that there is an explicit challenge and presently an excellent opportunity to influence circumstances so that women have genuinely equal access to management positions." After almost three years of consultations, research, study missions and analysis, the Industry Task Force on Leadership and Management Skills has released Enterprising Nation: Renewing Australia's Managers to Meet the Challenges of the Asia Pacific Century, a report recommending urgent action to upgrade Australia's management performance.

The report highlights the lack of depth in Australian management ranks and identifies several key challenges to improving our management performance. One such challenge is to capitalise on diversity—ensuring that management positions reflect Australia's multicultural population and provide more women with better access to the upper ranks.

An exhaustive program

The Industry Task Force on Leadership and Management Skills was convened by the Hon. Simon Crean, Minister for Employment, Education and Training, to advise on measures to strengthen management development and business leadership within Australian enterprises. It was asked to identify effective management practices in a range of areas, raise awareness of the need for improved leadership and management skills, and foster enterprise commitment to management development. Its terms of reference concentrated on private sector management, however many of its findings and recommendations are also relevant to the public sector.

The 12 Task Force members were drawn from major corporations, small business, higher education, and the human resource, consultancy and advisory sectors. They developed an exhaustive program—carrying out extensive consultations with enterprises, industry groups, peak associations, individuals, relevant organisations and Australian and overseas institutions. The Task Force also organised and developed its own consultative forum, including conferences and seminars. An extensive research program was also conducted, comprising 27 separate projects and covering all areas of the Task Force's terms of reference. As well, the Task Force developed curriculum material for management educators and trainers.

How does Australian management rate?

The Task Force found that the best Australian managers, enterprises and managerial development processes are equal to the best in the world. However, in general, Australian management did not come out of this rigorous examination with flying colours. "In comparison with other countries in previous years, Australia's competitive performance dropped in the early nineties but is on the rise again, albeit slowly," the Task Force concluded. Task Force consultations and research indicate that Australia's managers do not have the education or skill levels of other major trading nations, and that most of our educational and training institutions are not providing world class services.

The World Economic Forum's 1994 *World Competitiveness Report* ranked Australia 18th out of 41 countries in terms of management. Our overall ranking was higher at 13, indicating that management performance is lower than our general competitiveness. Australia rated well for business efficiency, but scored poorly in entrepreneurship and innovation.

In a blind survey, 502 Asian managers in five countries with which we actively trade were asked to compare Australian managers with those in five competitor countries active in our region. Australian managers were ranked last in three areas: ability to look well into the future, entrepreneurial skills, and technical skills. They ranked poorly in all the remaining categories, including management skills and cross-cultural skills. In comparison Japan, the USA and Germany rated well.

The Task Force also found that Australian managers have fewer formal qualifications than those of the world's major trading nations. Less than 30 per cent of Australian managers have degrees, compared with 60 per cent in Germany, over 70 per cent in France, and over 80 per cent in both Japan and the USA.

The glass ceiling: getting thicker

A particular Task Force finding was the need for cultural change in organisations and management, to broaden narrow mindsets and to encourage more creative approaches to management in general. A strong example of limited vision was poor management for diversity.

Noting that there are still few women at senior management level in Australia, the Task Force commented that "the glass ceiling appears to be thickening". The Task Force advocated reversing this trend, believing that "more women at senior levels will benefit enterprises and Australia economically". This was supported by research which suggests that women are well-placed to instigate different management styles more suited to today's organisations.

According to 1994 figures from the Employment and Skills Formation Council, women are also establishing small businesses three to four times faster than men. Women have proven very successful in small businesses, which require entrepreneurial and customer-oriented management skills. Task Force consultations, and anecdotal evidence from highly successful businesswomen who have left corporations, indicate that many women, frustrated by the glass ceiling in larger organisations have left to set up their own enterprises.

Capitalising on women's talents

Enterprising Nation identifies "capitalising on the talents of diversity" as one of the five key measures for upgrading management performance. Other recommendations included developing an enterprise culture, upgrading business services and vocation; education and training, achieving best practice management development in organisations, and reforming management education. The recommendation of capitalising on diversity focuses on the need for more female managers and managers from multicultural backgrounds. "Major improvements in management skills can be effected simply by opening up equal opportunities for these underutilised groups to attain the senior levels of corporate management."

The report recommends three major initiatives for capitalising on diversity:

- giving a higher priority to management for diversity in workplaces;
- as a short-term measure, developing a National Strategy for Women in Management; and
- ensuring that government agencies which give advice and assistance to the private sector, such as the Affirmative Action Agency and Aus-Industry are resourced to upgrade their educational and promotional roles in relation to management for diversity.

The proposed National Strategy for Women in Management would identify industry targets for the year 2000, for the number of women in middle and senior levels of management, boards of directors, and academia. These five-year targets are intended as "realistic numbers for which to aim", not quotas, and should be developed and determined by the private sector itself. Industries and enterprises would set targets according to their particular circumstances, ie. there would not be uniform targets across the board. The Task Force envisages peak industry bodies—such as the Business Council of Australia, the Australian Chamber of Commerce and Industry and the Australian Institute of Company Directors—showing leadership in setting targets.

Women should also be targeted for management development, which will assist more women to break the glass ceiling. The Task Force recommended that women should occupy at least 40 per cent of all places in management school courses. Where this is not the case, the Task Force recommends national targeting of scholarships and a fees arrangement where government and/or universities subsidise the system to enable industry to support two female employees for every male. This strategy has already been tested successfully in the vocational education and training area.

The Task Force also recommends the establishment of a database of women suitable for appointment to boards of directors. This initiative aims to counter the common misconception that suitable women are not available, and to increase the number of women who influence the direction and development of Australian enterprises.

These initiatives, coupled with the "proper application of the merit principle", as well as better development and advancement opportunities, will allow women to take their place in the senior management ranks. But the Task Force concluded that poor management performance is such a critical issue for the Australian economy that "unless enterprises act more vigorously to promote women to senior levels then in the near future the Federal Government may need to contemplate more stringent, regulatory measures over a limited period to promote change".

THE FACT THAT BUSINESS HAD DROPPED OFF PUZZLED THEM AS THEY HAD SUCH GOOD OLD FASHIONED VALUES.
MANAGEMENT
WHITE ANGLO-SAXON MALES ONLY

Facing the Asia-Pacific century

Asian economies are among the fastest growing in the world. They are challenging the traditional dominance "developed world"—producing competitive manufacturers and generating and demanding world-class services.

An increasing proportion of Australia's merchandise exports are going to the Asian region rather than our more traditional markets such as North America and Europe. In 1972 only 45 per cent of Australian merchandise was exported to Asia—by 1994 this had increased to 60 per cent. Direct investment in the region by leading Australian companies is also increasing, with nearly 70 per cent of Australia's top 20 companies operating or making major investments in Asia. The recent Asia-Pacific Economic Cooperation agreements to open up trade in the region have also contributed to the momentum for change.

The challenge for Australia is to keep pace with growth in the Asia Pacific region. Enterprising Nation has outlined a range of initiatives "necessary to sustaining and improving economic activities and living standards for all Australians in the face of profound changes in the global business environment". The onus is now on Australian industry, governments, unions, workers and educational institutions to become "enterprising" in the broadest sense of the word.

• • •

Enterprising Nation *is presented in three parts: the executive summary, the main report and the research report,which is presented in two volumes. The executive summary is available for $7.95, the main report for $29.95 and the research report for $39.95, from Commonwealth Government Bookshops in capital cities.*

Women's Bureau, 1995 *Women and Work*, Vol 6, No 2.

WOMEN AND WORK

Creating your own survey

To create your own survey, you will need to make some decisions.

- What is the topic of the survey?
- What questions do I want to ask?
- Will they give me the type of answers I want - do they address the issue?
- How many people will I survey?
- Who will I survey - men? women? both? Aboriginal? NESB? old? young?
- How will I present the results tables? graphs? report?
- Is the survey balanced and unbiased?

Now you will need to:

1) write at least 10 of the questions that you think were asked in the Women and Work survey
2) develop a survey sheet to record your information on
3) go forth and survey!! Ask as many people as you can for their responses to your questions.
4) collate your results on to one sheet
5) draw some conclusions from your results
6) present your results in a suitable way (chart, graph, tables, report, presentation or talk).

Here are some questions to get you started.

QUESTIONNAIRE

1. Where were you born?
2. What is your age?
3. Do you work in paid employment?

YES ☐ NO ☐

4. If yes, what do you do?
5. If no, what do you do?
6. _____
7. _____
8. _____
9. _____
10. _____

Things to think about after the survey:

Did you come up with similar results to the Women and Work survey?

Why do you think that is?

Consider:
- the number of people surveyed
- time of day the survey was done
- your local area
- your questions.

Are there other issues to consider?

REFLECTION ON WORK

Issues to raise:

- women as carers of the elderly, people who are ill or children
- unpaid work or voluntary work
- women in some cultures are expected to stay at home
- some men are embarrassed if their wives work
- women often are unskilled workers or less trained compared to male colleagues
- childcare problems eg. unavailable, not long enough hours
- shift work
- many overseas qualified people immigrate to Australia only to discover their qualifications are not recognised here
- women eg. farmers, often work with their husbands, but aren't recognised as "workers" and are not paid as such or covered by workers compensation, superannuation etc
- table 1 (handout 2) does not mention how many men are married
- because many families are traditional in their roles and expectations, many women don't have the time to put into careers or training.

SECTION 6

WOMEN IN AUSTRALIA

Women in Australia ... a snapshot

BEST COPY AVAILABLE

LEARNING OUTCOMES

In the context of this study students will:

- set literacy and numeracy goals
- gather information and mathematical data
- interact with others and in groups
- reflect on learning
- perform procedures
- gather information and mathematical data from texts
- present information and mathematical data in texts
- use mathematics creatively
- use language creatively
- use technology
- solve problems
- increase confidence and participation
- make choices.

TOPICS

Language/Literacy

- procedural text
- mathematical language
- summarising

Numeracy

- tables, graphs and charts
- percentages
- fractions
- estimation
- calculator
- large numbers

RESOURCES

- teacher notes 1- 2
- handouts 1-17

FUTURE DIRECTIONS

- explore issues affecting women in more detail eg workforce participation, marriage, political representation, life expectancy, birth rates
- anti-discrimination legislation
- families

	Activities	Resources	Assessment
	Social issues affecting women		
Introduction	• brainstorm issues	teacher notes 1, handout 1	contribution to discussion
	• guess answers	handout 2	use of prior knowledge
	• check answers	table on handout 3	
	• discuss maths concepts		evaluate mathematical data in context, summarise
	A snapshot of progress		
Language/ Literacy/ Numeracy	• interpret table	handout 3	mathematical data from text
	• discuss validity of statements		
	• list mathematical terms covered	mathematical data in table	critical evaluation of own and other students statements
	Women in Australia		
Literacy	• read part 1 of article - together or individually	handout 4	
	• discuss issues and students' personal experiences		
	• summarise changes	completed handout 3	demonstrate synthesis of summary and mathematical information to form new text
	• read all of article	handout 5	
	• highlight key phrases		
	• list main ideas in point form		
	• write summary		take risks in expressing opinion
Numeracy	• present information in table in other form eg pie chart	handout 6	

	Activities	Resources	Assessment
Numeracy	• discuss how changes in scale can distort information presented		
Language/ Literacy/ Numeracy	**Trading Places** • discuss headline & photo	handout 7	discussion
Language/ Literacy/ Numeracy	**Why girls want those jobs for the boys** • read text, discuss concepts, read table • discuss vocabulary • complete worksheet	handout 8 handout 9	discussion student participation
Numeracy	**Who does what?** • find data in texts and complete calculations • calculate percentages • present data as pie graph • interpret and evaluate data/graphs	handout 10	completion of worksheet oral presentation
Language/ Literacy	**Who should do what work?** • opinion writing	model texts of exposition handouts 11,12	student production of text

	Activities	Resources	Assessment
Language/ Literacy	**Cut above the rest** • discuss headline • read article • write about skills and knowledge • read and write procedural text	handout 13 handout 14 handouts 15,16	discussion report to group conference text
Language/ Literacy	**Women, Men and Work** • discuss issues affecting men and women at work**	teacher notes 2 handout 17	

additional activities

.* pie charts — Reasonable Force handout 8, 9
** cartoons — Reasonable Force handouts 1, 2.

The concept for this section was developed by Jill Finch, Terri Ryan and Leslie Stein.

WOMEN IN AUSTRALIA, 1970 - 1995

Discuss with students what might be in the article by looking at the headline and the captioned photo.

Introduce the objectives of:
- looking at social issues affecting women
- comparison using tables and text.

Brainstorm a list of issues which might be covered by the article.

Working individually or in pairs predict the answers (handout 2).
Emphasise that the guesses are relying on what students know now.

Check the answers against the table on handout 3

Discuss concepts of percentages, rates per 1000, pay as a percentage of ...

SUBURBAN HUMDRUM FIRED FIGHT AGAINST THE TRADITIONAL ROLES

Life for women has changed enormously over the past 25 years.
SUSAN HORSBURGH *takes a snapshot of life from 1970 and 1995*

Action speaks louder than words ... D'Aprano after chaining herself to the Melbourne Commonwealth Building in 1969 in support of equal pay for men and women— Picture: Spinifex Press.

The Weekend Australian

WOMEN IN AUSTRALIA 1970 - 1995

Before you read ...

Estimate the answers to the following questions. You are not expected to know all of the answers. At this stage, don't look at the article.

1. The percentage of births to mothers under 25 in 1970 was:

   24% 32% 46% 54%

2. The percentage of births to women under 25 in 1993 was:

   10% 25% 36% 50%

3. The percentage of women in the workforce in 1995 was:

   10% 25% 54% 76%

4. Women's pay as a percentage of men's pay in 1995 was:

   48% 65% 84% 100%

5. The marriage rate per 1000 people in 1995 was closest to :

   6 26 46 106

6. Women's life expectancy in 1995 was :

   72 81 90

7. The number of women in the House of Representatives in 1995 was :

   0 2 10 14

8. The number of women in the Senate in 1995 was:

   3 6 12 17

Check your answers using the table on handout 3

A SNAPSHOT OF PROGRESS

A SNAPSHOT OF PROGRESS		
	1970	**1995**
Marriage rate (per 1000 people)	9.3	6.2 (1994)
Median age of brides	21	26
% of births to mothers under 25	46	25 (1993)
% of women in the workforce	38	54
Women's pay (as % of men's)	60	84
Women's life expectancy	75	81
Women in house of Reps	0	14
Women in the Senate	3	17

Write a sentence about each fact to explain what the figures are showing you. The first one is done for you.

Marriage Rate (per 1000 people)
Less people are getting married now each year compared to 1970.

Do this one together with your teacher and/or a partner:

Median age of brides "Median" age of brides means the "middle" age when all the ages are written down in order, eg. in this group of ages , 21 is the median or middle age of the ones given.

17 19 20 21 22 23 24

Now try these:
Percentage of births to mothers under 25

Percentage of women in the workforce

Women's pay as a percentage of men's

Women's life expectancy

Women in the House of Reps

Women in the Senate

It was about 1970 when war broke out in Australian suburbia. *The Female Eunuch* had just hit the book shops and women had begun questioning their preordained lot in life.

Eva Cox, a founding member of the Women's Electoral Lobby in 1972 and now co-convenor of the Women's Economic Think Tank, says the power struggle between the sexes meant the end of suburban tranquillity.

"Women were expected to go away, have babies and talk about knitting patterns and recipes and those who didn't feel like it were regarded as distinctly odd," Cox recalls.

"I can still remember some bitter confrontations ... the husbands saying: "But this is what you wanted!" and the wives saying: "It might have been what I thought I wanted but it's bloody boring!"

After Greer's book was released, Anne Summers addressed a seminar where a middle-aged woman confessed she had covered *The Female Eunuch* in brown paper and hid it among her shoes after her husband had forbidden her to read it.

Feminism was in its early stages in 1970, camped on the fringes of mainstream politics.

It was a time when salaries varied shamelessly between men and women, job advertisements were almost always gender-specific, divorced women could get the widow's pension if they were the "innocent" party in the marital breakdown and working mothers were accused of traumatising their latch-key children.

The politicised 60s had brought anti-Vietnam protests and the American civil rights movements, Woodstock and student riots in Europe. There was a palpable sense of change, and Cox says women had already begun to flow into the workforce by 1970 - she insists the women's movement was a reaction to social change, rather than a cause.

Regardless, the past 25 years have witnessed irrevocable changes to Australia's social landscape.

According to the (recently retired) Australian Statistician, Ian Castles, the author of *Women in Australia*, women made the most dramatic leap in status ever during this period - a leap reflected in legislation such as the 1984 Sex Discrimination Act and the Affirmative Action Act in 1988. The proportion of people living alone, defacto couples and one-parent families has risen - one of the main reasons being the Family Law Act 1975, which introduced no-fault divorce and sparked a sudden rise in the number of divorces and remarriages and a reduction in the duration of marriages.

Coupled with this has been a trend towards later marriage and child-bearing and smaller family sizes - due to a rapid expansion in the use and efficiency of contraception and an acceptance of women's rights to pursue careers.

The "crude" marriage rate (marriages per 100 people) - which peaked at 9.3 in 1970 - fell to 6.2 in 1995, close to the 1930s all-time low, as Australians delayed marriage and opted for defacto relationships. The median age of grooms (29 years) and brides (26.6) has jumped five years over the past two decades.

The proportion of births to mothers under 25 years old almost halved from about 46 percent in 1970 to 25 percent in 1995, while that of mothers aged 30-34 almost doubled in the same period. And the proportion of ex-nuptial births - which accounted for 8 percent in 1970 - tripled to a quarter of all births by 1993.

During the past 25 years, education has increasingly replaced marriage as the key to economic independence.

More women than men are now enrolling in higher education and more women than ever are studying courses such as law and engineering. Castles says the increase in women's workforce participation has grown out of society's acceptance of their right to education, better contraception - and therefore control over family and career - technological developments which have resulted in jobs reliant on physical strength and a desire or need for additional income.

Now 54 percent of men are in paid employment compared with 38 percent of women and 83 percent of men in 1970.

But women's average weekly earnings are still lower than men's in all occupations, even those considered to be traditionally female.

The Weekend Australian

More than 20 years after the concept of equal pay for work of equal value was mandated by the then Conciliation and Arbitration Commission in 1972, wage parity is still elusive - partly due to women's interrupted working patterns.

In 1970, women earned 60 percent of their male counterparts' pay packets. Now it is about 84 percent for non-managerial women and 75 percent for those in managerial positions.

And for most women their workload still continues at home. The existence of the much-lauded Sensitive New Age Guy may be debatable but surveys show he certainly does not carry a mop. An Australian Bureau of Statistics study released this year painted the 90s father as more child-minded but showed the time spent on housework had changed very little since the early 70s.

"It appears it is the women who are doing the adapting, not the men." sociologist Michael Bittman says.

A survey in 1992 by the Bulletin also found women felt "shortchanged" and were angry about the inequality persisting in their lives.

As Summer points out in her introduction to the new edition of *Damned Whores and God's Police*, added pressures on women have meant an increase in drug use, including cigarettes and alcohol, as well as an alarming epidemic of eating disorders.

She says "it is too soon to sound the death knell of sexism as an organising principle of Australian culture and society".

"I think the country is still run far too much by men for men, " she says.

In 1970 there were three women in the federal Senate and none in the House of Representatives . By 1995 14 women had been elected to the Lower House (less than 10 percent) and 17 to the Upper House (22 percent).

Women's life expectancy has improved by six years since 1970 to an average age of 81 (75 for men) but in the same period the rate of breast cancer death has risen from 3 percent to 5 percent.

The gains since 1970 are unquestionable but the struggle for women's rights seems far from over.

Cox sums it up: "The status of women has improved but we've still got a long way to go."

"We need to change the cultures of workplaces and government boardrooms so that we place more emphasis on quality of life and less on the bottom line."

Feminism has been pushing that but it hasn't been listened to yet because there's too many bloody workaholic males who are too scared that if they get home early they'll have to do the washing up."

WOMEN IN AUSTRALIA, 1970 - 1995

Write a summary of the changes you think have happened to women over the period 1970-1995 from what you have seen.

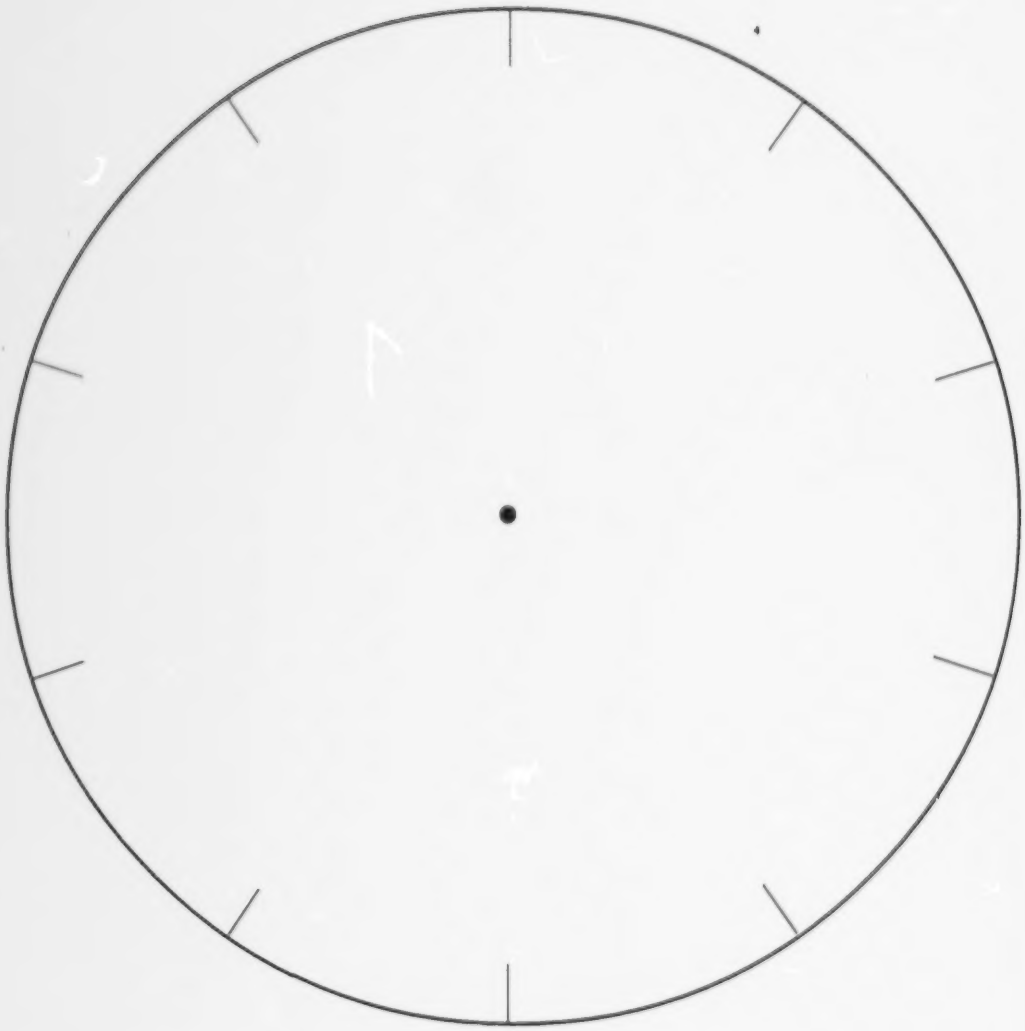
You can also use ideas from the table: "A Snapshot of Progress"

1. Continue reading the article, highlighting or underlining key phrases and ideas as you read.

2. List the main ideas of the article in point form.

3. Write a summary of the changes that have happened to women in Australia from 1970 to 1995.

PIE CHART



adapted from: Numeracy on the Line

TRADING PLACES

Alice Ashton ... "I've had customers who just refuse to have a woman working on their car and others who can't believe I'm strong enough."
Photograph by DAVID HANCOCK

SMH 20/4/94

BEST COPY AVAILABLE

WHY GIRLS WANT THOSE JOBS FOR THE BOYS

Despite advances in equal opportunity, men continue to dominate industries where tradition has favoured brawn over brains, writes

ANITA CATALANO

There are 38,734 male apprentices and 5,161 female apprentices in NSW, says the Department of Employment, Education and Training.

Of those, 3,969 women are enrolled in TAFE courses compared with 38,000 men.

Jozefa Sobski, TAFE's director of women's policy programs, said that national trends revealed a decline in the total number of apprenticeships across all trades. Although TAFE encouraged women into its courses, it couldn't protect them from harassment in the workplace.

"Female apprentices cop a lot on the job," she said. "It really isn't easy for them."

Ainsely Dawrent, the marketing officer for Automotive Group Training, said it was the employees on the workroom floor who discouraged women into trades.

"It's not the girlie magazines, it's the attitude of other workers to women and I suppose other minority groups as well," she said.

Ms Dawrent, whose organisation recruits apprentices for the car industry, said that advertising directed towards women should also be a priority.

"When the Melbourne Metropolitan Board of Works directed their advertising of apprenticeships to women, recruitment rose by 37 per cent," she said.

In the automotive repair trades the figures for women are low - only 56 out of 7,002 motor vehicle apprentices are women.

At State Rail only 10 women are apprentices out of a total of 365. This year three female apprentices have been hired in telecommunications, painting and electrical mechanics/ fitting.

Philippa Hall, the senior adviser to the NSW Sex Discrimination Commissioner, said that hiring women when they were older would be a way of increasing the number of female apprentices.

"Sometimes women in their 20s who have gone through a career in sales or clerical know they don't want to do it for the rest of their lives so they want to try something else," she said.

"There is a high dropout rate of girls who go into non-traditional trades partly because they have no idea what it's all about and they also tend to drop out because of the attitude of employers.

"You must have good parents who don't turn you off, school mates as well as teachers and careers advisers who don't turn you off, before you can make a success of it."

Catherine Harris, director of the Affirmative Action Agency, suggested that schools should hold employment nights for parents and the community.

"We need role models to go out and educate people about these non-traditional careers," she said.

Peter McClelland, State president of the Construction, Forestry, Mining and Energy Union, blamed the poor female participation rate in his industry on the public perception of the building sector.

"The number of female apprentices is very low," he said.

"Past allegations of corruptions and royal commissions have disturbed the image and parents don't want their daughters to go into something like this."

SMH 20/4/94

BEST COPY AVAILABLE

TRADING PLACES

Understanding the text

1. Ainsley Dawrent works for Automotive Group Training. What does this organisation do?

2. What is the main problem of females working in trades?

3. What does Ainslely Dawrent think can be done to increase the number of women in trades?

4. In which three trade areas have female apprentices been hired at State Rail? Explain what these trade areas do.

5. Complete this table

Name	Job	Organisation
Jozefa Sobski	_____	_____
_____	marketing officer	_____
_____	_____	NSW Sex Discrimination Commissioner
_____	director	_____

Vocabulary:

6. Find the following words in the text. Underline them. If you're unsure of their meaning, try to guess from the text, check with a classmate or look them up in the dictionary:

apprentice	recruitment	priority
decline	clerical	harassment
affirmative action	cop a lot	perception

FINDING THE FACTS

Find the following information in the article:

Number of female apprentices in NSW	
Number of male apprentices in NSW	
Total number of apprentices in NSW	
How many of these women apprentices are doing TAFE courses?	
How many of the male apprentices are doing TAFE courses?	
Total number of apprentices doing TAFE courses?	

Making sense of the facts

What percentage of apprentices are male?

What percentage of apprentices are female?

What percentage of apprentices are doing TAFE courses?

What percentage of male apprentices are doing TAFE courses?

What percentage of female apprentices are doing TAFE courses?

Draw pie charts to show these figures.

What can you say about these statistics?

WRITING OPTIONS

Should women be encouraged to enter non-traditional jobs such as motor mechanics?

ARGUMENTS FOR	ARGUMENTS AGAINST

BEST COPY AVAILABLE

WHAT'S YOUR OPINION?

Alice Ashton says some customers have a problem with her working on their cars. Why do you think this is? Do you think it is reasonable? What's your opinion?

CUT ABOVE THE REST

Mutita Sheargold learned to carve fruits and vegetables when she was a young child in Thailand.

It was not an unusual thing to do - people from Thailand have made fruit and vegatable carving into an art form.

When Mutita came to Australia, she put that knowledge and experience to good use.

Read her story ...

Carving out a career ... Ashbury food artist Mutita Sheargold

Cut above the rest

WHEN you've teaching people how to turn fruit and vegetables into works of art, you have to start from the beginning — how to hold a knife.

That's according to Ashbury artist Mutita Sheargold, who ought to know — she was taught the art when just a child in Thailand, and now passes her knowledge on to others.

Her clientele includes a range of people, from professional chefs to community groups, in her home, at colleges and community centres.

It's not hard to see why she is being kept busy. Under Mutita's knife, formerly recognisable fruits and vegetables take on brand new forms.

Pumpkins become intricate fitly bowls, watermelons turn into lush jungle flowers, and — Mutita's favorite — frangipani flowers emerge from humble spring onions.

Mutita's art will feature at next year's Canberra Show, sponsored, naturally, by the Heart Foundation and the Fruit and Vegetable Wholesalers Association.

Canterbury Express 4/95

BEST COPY AVAILABLE

CUT ABOVE THE REST

In small groups… **discuss and list**…

What are some of the skills and knowledge that Mutita brought with her from Thailand to Australia?

What are the skills and knowledge that she would have had to learn in a new country?

How could she go about gaining these? How could she combine the two - her 'old' skills and her newly acquired skills?

WRITING PROCEDURES:

Mutita came to TAFE to improve her reading and writing skills in English.

Directions she wrote on how to make a frangipani from a spring onion are on handout 16.

Read through them.

You might want to try to follow Mutita's directions... just don't expect your first 'frangipani' to look like hers!

List three things that you do well - it can be an everyday thing -like making a Vegemite sandwich - or something more complex like changing a tyre.

1.

2.

3.

Choose one and try to write directions for someone else to follow.

FRANGIPANI

TOOLS

1 Thai carving knife

1 paring knife

1 paint brush

1 bottle of yellow food colour

BASIC INGREDIENTS

1 large spring onion

INSTRUCTIONS

1. Cut off the top of the spring onion leaving a 2 cm stalk.
2. Divide root part into 4 sections and cut off the section at the root.
3. Hold a carving knife in a pencil grip.
4. Divide the spring onion into five sections by cutting down and stopping about 1 cm from the connection between the spring onion and the stalk.
5. Then shape both sides of each section right through to the centre making a pointed frangipani petal.
6. Separate each layer with your fingers.
7. Soak carved spring onion in cold water until it has opened.
8. Remove from water and separate the outer layer of the onion and twist it off. (If you see the clear skin inside or outside of the flower, it needs to be removed.)
9. Finally, paint the inside of the flower with yellow food colour so it looks like a real frangipani.

STORAGE

Painted frangipani should be used as a garnish straight away.

Keep carved unpainted spring onion in a tied plastic bag and put it into the fridge until it is needed. This carved flower can be kept for 3 weeks.

MUTITA Literacy student 1995

WOMEN, MEN AND WORK

Discussion has focussed on women and the social issues affecting them. Students could be encouraged to see these discussions against a background of historical perspectives affecting both men and women. Discussion could include :

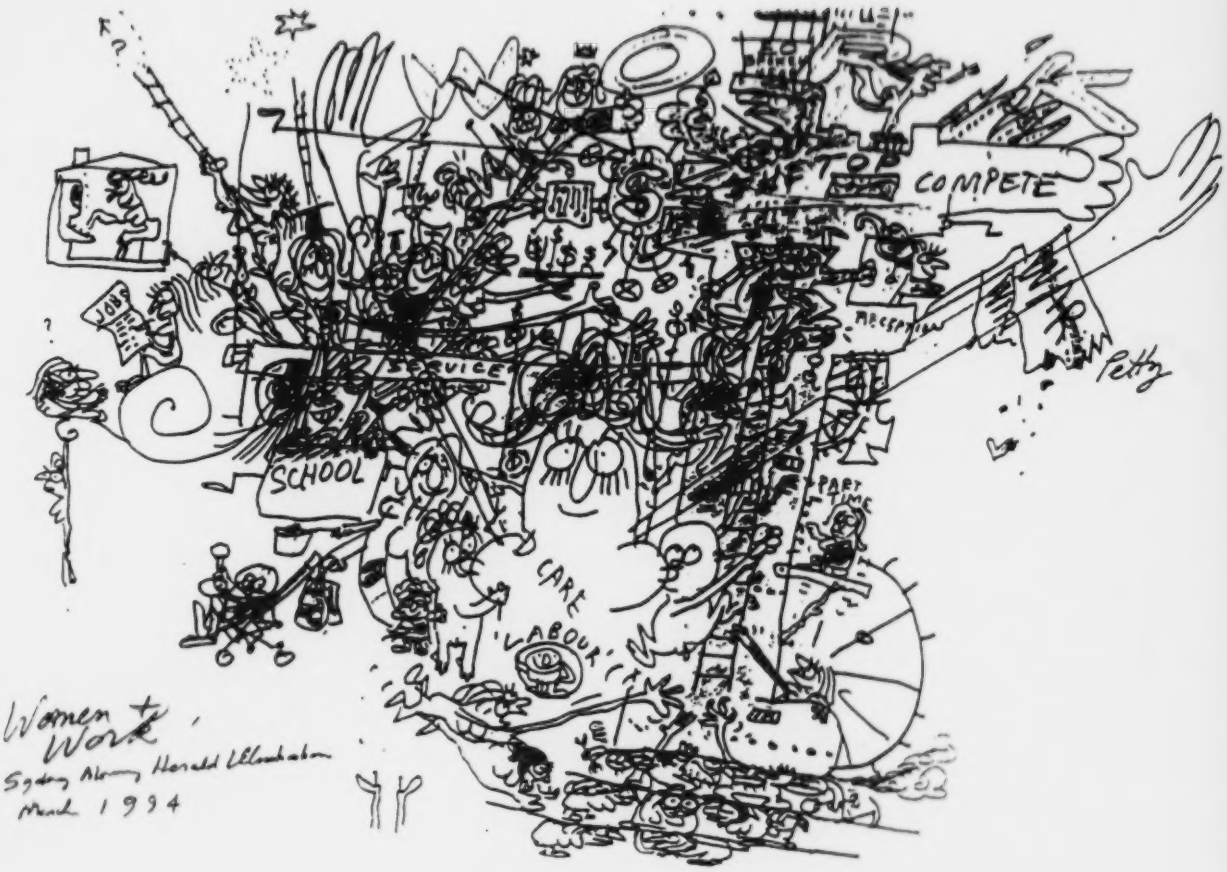
- What type of work have women done in your family over the last 3 generations ? Drawing a time-line is a useful visual way of representing the similarities and differences.
- What type of work have men done in your family over the last 3 generations?
- What historical factors have influenced this work?
- What other factors have influenced this work ? Why?
- Have the factors had the same influence on the men as the women?

Ask students to look at the cartoon (handout 17).

- What does it represent ?
- Why is it titled "Women and Work" ?
- Why are 'women' and 'men' written at the top of the cartoon?

Ask the students to write their opinion of what the cartoon is saying. They may also want to have a class debate.

WOMEN AND WORK



Bruce Petty, SMH 3/94

BEST COPY AVAILABLE

SECTION 7

TOURIST SPOTS

Tourist Spots ... come and visit

BEST COPY AVAILABLE

LEARNING OUTCOMES

In the context of this study students will

- gather information and mathematical data
- get information and mathematical data from texts
- present information and mathematical data from texts
- use mathematics creatively
- use language creatively
- increase confidence and participation
- make choices.

TOPICS

Language/Literacy

- listening
- presentation of findings
- role play
- note taking
- writing travel itinerary
- genres - personal letter, letter of opinion,
- reading newspaper article
- persuasive/ descriptive/ factual language

Numeracy

- calculators
- budget
- critical numeracy
- percentage

RESOURCES

- teacher notes 1
- handouts 1-8

to be supplied by teacher:

- tourist brochures
- road map of Canberra
- calculators

FUTURE DIRECTIONS

- plan a holiday in your local area, research on attractions and (Aboriginal) history
- Australia as a travel country – eco tourism/backpacking
- describe nature/places – text comparison (travel brochure/tour guide/encyclopedia)
- write travel brochure/travel diary/tour guide for area of choice
- survey on travel preferences and leisure activities
- travel literature – ie Bill Bryson, Bruce Chadwick.

	Activities	Resources	Assessment
Introduction	**Where and how would you like to spend a holiday weekend?** • display photos of different places and leisure activities • mindmap student input/ vocabulary • free writing activity (time limit) • discuss teaching and learning styles, negotiate group organisation, activities and assessment events	photos as prompts	participation in discussion free writing sample formulate questions and set group and individual learning goals teacher observation
Language/ Literacy/ Numeracy	**Holiday weekend in Canberra** **A letter from your friend** • read letter and outline the task **Getting to know Canberra** • brainstorm: 'what do you know about Canberra?' • browse through travel brochures and maps. what kind of information do they offer? how is this information organised? vocabulary/abbreviations • read for details: 'Canberra – Welcome to the National Capital'.	handout 1 travel brochures and maps to be supplied by teacher handout 2	outline steps and materials needed to complete task participation in discussion reading brochures/maps for overview read brochure for details and complete worksheet

	Activities	Resources	Assessment
Language/ Literacy/ Numeracy	• listening comprehension and notetaking: 'Canberra: The Black Side'	script for tape teacher note 1 handout 3	listen accurately, take notes, reflect critically on issue
	• discussion: which of the information about Canberra did you find most important? what would you like to see?		evaluation of written and spoken text
	Planning the holiday		
	• explain worksheets and demonstrate completion, form small groups	OHP to model how to complete worksheets	
	• fill in table – travel itinerary, find places of interest on map	tourism brochures, maps, handout 4	complete travel itinerary, use maps competently
	• practice phone conversation – inquiring about accommodation	brochures on accommodation, phone, handout 5	phone conversation, note taking
	• work on budget spreadsheet – brainstorm and demonstrate math skills involved, estimate costs	calculator, handout 6	complete budget spreadsheet
	• present finding orally, compare results, evaluate group work		group presentation teacher and peer observation
Literacy	**Writing a letter of reply to your friends** • discuss language and layout of a personal letter, write letter of reply	handout 7	draft and edit a personal letter

	Activities	Resources	Assessment
Language/ Literacy/ Numeracy	**Tourism – blessing or curse?** **Important facts and figures about tourism**		
	• read newspaper article about tourists from Japan and find important facts and figures	handout 8	read article for main idea and for details
	• discuss pros and cons of tourist industry		complete calculations
Language	**Role play: A new tourist resort?**		
	• explain scenario and choose role card/role as observer	handout 9	participation in discussion
	• set rules for debate		participation in role play
	• role play and evaluate radio discussion		teachers and peer observation
Literacy	**Now write about it**		
	• explain/model language feature of different writing tasks		complete writing task
	• draft and edit letter of opinion/newspaper article		teacher observation
Reflection	• discussion: what did you learn: what do you want to follow up?	student folder and record sheet	reflect on learning outcomes complete record sheet

	Activities	Resources	Assessment
Language/ Literacy/ Numeracy	**The World** • brainstorm what students would like to know about other countries (if applicable, countries that other students come from)	prior knowledge of group handout 10	students report to group
	• complete cooperative logic game	handout 11	group feedback
	• plan a trip	handout 12	
	A dollar is a dollar • read text • complete worksheet on exchange rates	handout 13, 14	completion of worksheet
Numeracy	**Population** • complete worksheets on world populations	handout 15, 16, 17	complete worksheets
Language/ Literacy	**A nice place to live** • opinion writing	handout 18	

Additional Activities

Blom and Barin *Everyday Maths* p 138, 152

The concept for this section was developed by Rita Brademann.

Footrot Flat
PO Box 999
Cobram 3643 Vic
(date)

Dear Chris,

How are you? I'm sure you are surprised to hear from us after such a long time!

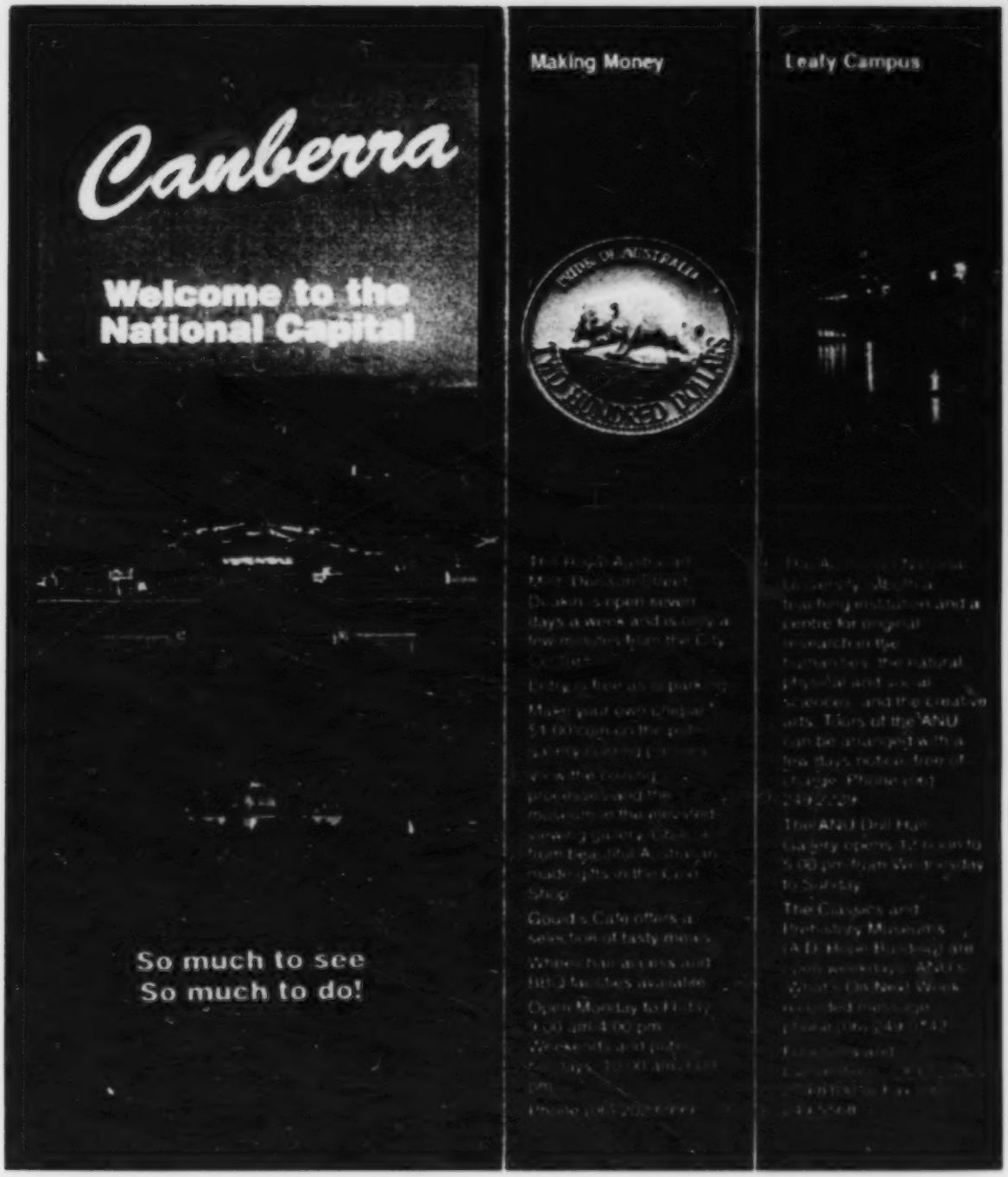
We are writing to you today for a special reason. Our wedding anniversary is coming up soon, and Wally and I are thinking of doing something completely different this time. Just for once we would like to take a break from farm and country life. Would you believe it, neither of us has ever been to Canberra, our national capital! But we have heard a lot about this beautiful city and think it's time to pay it a visit.

Please help us to plan a holiday weekend in Canberra. We'll arrive in the afternoon on Friday, (date), and leave after lunch on the following Monday. As we are very busy with shearing at the moment we won't have any time to study travel brochures and to look for accommodation. It would be just great if you could do that for us and make some suggestions where to go and where to stay. Wally seems so be interested in historical places and art galleries, whereas I would also like to see the Canberra countryside and perhaps a national park. And don't forget the entertainment - we really want to kick our heels up!

We hope to hear from you soon.

Yours

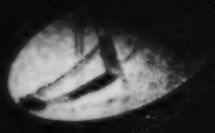
Edna and Wally



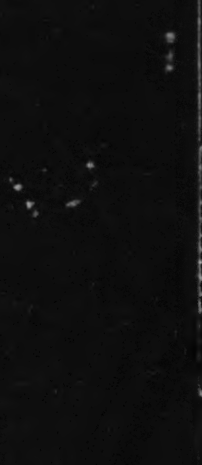
BEST COPY AVAILABLE

Kangaroos & More

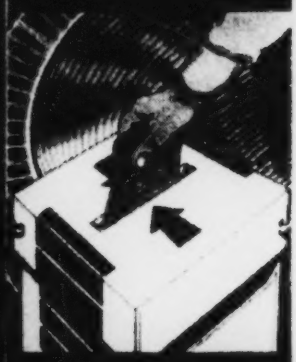
Discover Outer Space



Fast Down Hill



Let's Vote



BEST COPY AVAILABLE

Miniature World

Cockington Green is unique. It features meticulously crafted miniature buildings of Great Britain set in a superb rural and garden

Visit the Parsonage Tea Family Restaurant which serves traditional English fare or take a ride on a miniature steam train around the grounds. Other facilities include a kiosk and a picnic playground area with free gas barbecues.

Cockington Green is open every day (except Christmas and Boxing Days) from 9.30 am-4.30 pm. It's on Gold Creek Road off the Barton Highway in Gungahlin. Phone (06) 230 2273.

Dinosaurs Galore

Australian Dinosaur Museum (the new dumaresq prehistory collection) is Australia's first museum dedicated to Dinosaurs and Pre-Historic Animals. There are 300 exhibits including over full-size replica skeletons, huge bones, skulls and fossils and models of 3 Australian dinosaurs.

Facilities include a Museum Shop and a Dinosaur Cafe.

Open seven days 10.00 am-5.00 pm (except Christmas Day). Admission charges apply. Phone (06) 240 2655.

The Museum is at the corner of Gold Creek Road and the Barton Highway in Gungahlin, ACT, just north of the City Centre.

Stars of Sport

Let one of our guides show you around the world of sport — home of Australia's present and future sporting champions. See the facilities and equipment including videos and sports memorabilia. Have a chance to participate in the activities.

Tours leave daily from the AIS shop, right behind the statue (above) at 11.00 am and 2.00 pm and last for about an hour.

You'll find the Australian Institute of Sport at the Belconnen Drive Entrance of Lake Ginninderra Drive, Bruce. Phone (06) 252 1444. There is no entry charge for...

Talk to the Animals

Have fun at Australian Reptile Park, the largest collection of reptiles in the southern hemisphere. Set in the region of [illegible] Australia's [illegible] wildlife. Visit the [illegible] and [illegible] and [illegible] and

BEST COPY AVAILABLE

Members and Senators

Parliament House is the reason for Canberra's existence and the focal point of the Parliamentary Triangle.

Join a conducted tour of the buildings' imposing halls and chambers or simply stroll through the public areas. See portraits of past Prime Ministers, works of art and special exhibitions. Watch procedures in the House of Representatives and Senate when in session.

Visit the Parliament Shop and restaurant and walk up and over the top of the building and admire the view of the city.

Open daily 9.00 am-5.00 pm later when Parliament is sitting. Admission is free. Phone (06) 277 5399.

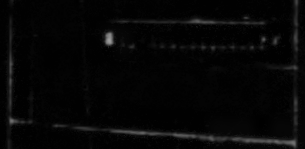
Art for All

Located on the foreshore of Lake Burley Griffin, the National Gallery of Australia was opened in 1982 and houses the National Collection of art. The Gallery is open from 10.00 am-5.00 pm daily. There is free admission from 5.00 pm-9.00 pm on the first Thursday in every month. Otherwise admission is $3 for adults, students and concessions free.

The gallery runs a continuing exhibition program, including major collections from museums and galleries overseas. Facilities include a gallery shop, Bistro Gallery and outdoor restaurant.

Guided tours conducted by volunteer guides – starting about an hour apart from the Lobby. Phone (06) 271 2502.

More Than Books



The National Library's rich collections of books, paintings, newspapers, films, photographs, manuscripts, maps, music and oral history recordings are the most extensive in Australia. Changing exhibitions can be seen in The Exhibition Gallery and the Visitor Centre.

The Library Shop specialises in Australian books and has a wonderful collection of gift ideas. Other facilities include a licensed restaurant and a bistro.

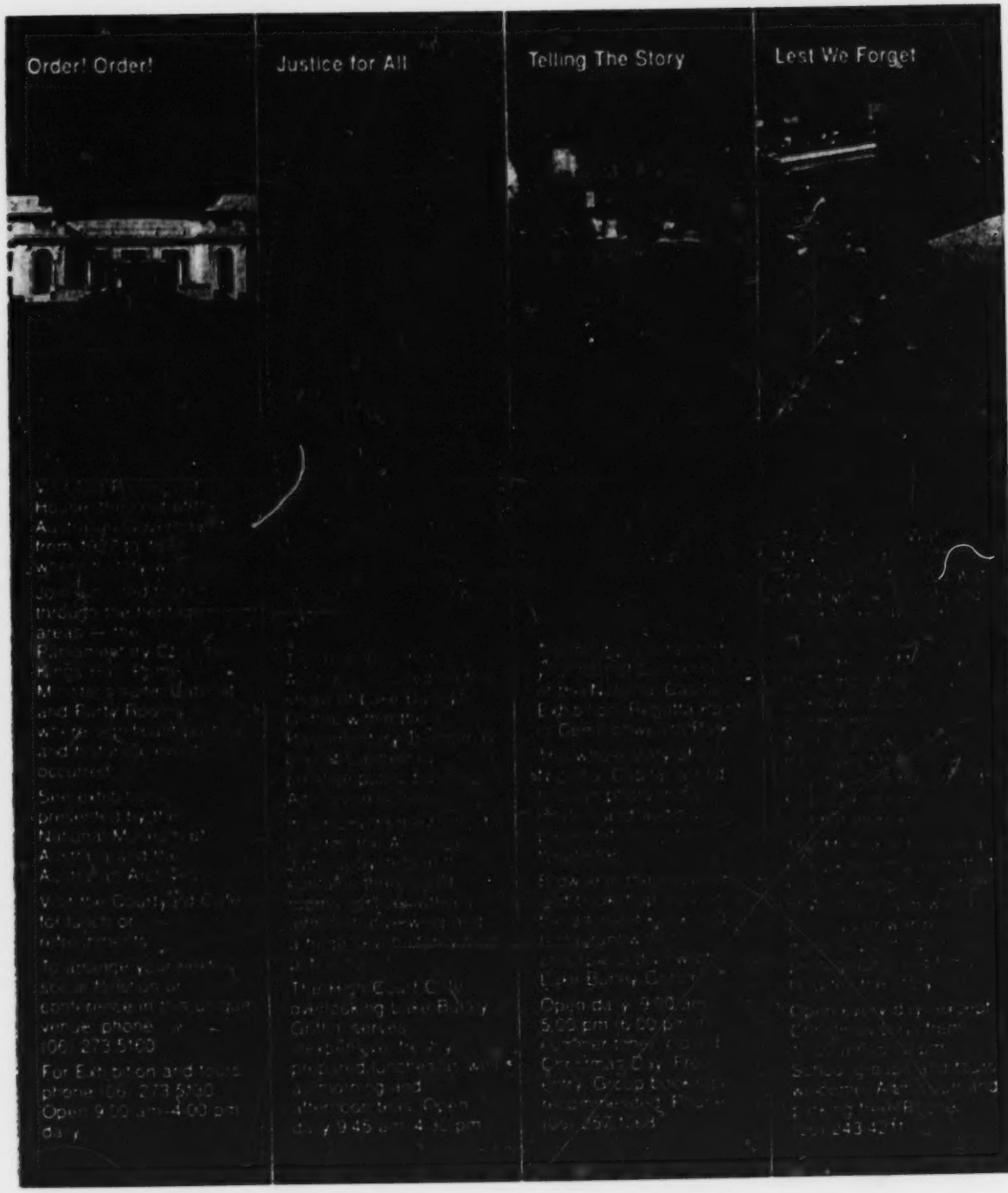
Open Monday to Thursday 9.00 am-9.00 pm, Friday and Saturday 9.00 am-4.45 pm, Sunday 1.00 pm-4.45 pm. Admission is free. Phone (06) 262 1111.

Hands On Science

Situated between the National Library and the High Court, Questacon – The National Science and Technology Centre is the ultimate hands-on experience.

Have hours of fun discovering science and technology by pulling levers, pushing buttons and exploring over 200 fascinating hands-on exhibits located throughout the Centre's six galleries.

Facilities include a cafe, gift shop and disabled access. The Centre opens daily from 10.00 am-5.00 pm (except Christmas Day). Admission fee applies. Phone General Enquiries on 06 270 2800, Schools and Group Bookings 06 270 2823.


Order! Order!
Justice for All
Telling The Story
Lest We Forget

Sight and Sound

Our Heritage

Gardens of Delight

Best Canberra Views

CANBERRA: SO MUCH TO SEE, SO MUCH TO DO!

Have a closer look at *Canberra - Welcome to the National Capital.* Read the brochure carefully and complete the following:

True or false?

1. Canberra offers a great variety of tourist attractions - from galleries and historical buildings to outdoor activities and entertainment.
2. Unfortunately, sightseeing in Canberra is very expensive. There are high admission fees for all places of public interest.
3. Lake Burley Griffin, Canberra's famous lake, is named after Australia's first prime minister.
4. Canberra's population has nearly reached the 300 000 mark.

Fill in the gaps

5. Parliament House is open _____ and admission is _____ .
6. If you are interested in Australian flora and fauna, you should visit _____ .
   _____ .
7. In the National Library you will find not only books, but also_____
   _____ .
8. Believe it or not - NASA is present in the Canberra region! To find out more about what they're doing here, you have to go to_____ .

Find the answer

9. How many diplomatic missions are there in Canberra?

10. How long is the longest bobsled slide in the Southern Hemisphere?

11. Which of the following places have free admission. ( ) Questacon, ( ) Australian War Memorial, ( ) Telecom Tower, ( ) Royal Australian Mint, ( ) National Gallery?

12. Which of the tourist attractions mentioned in this brochure make a reference to Aboriginal culture?

CANBERRA: THE BLACK SIDE (script for tape)

The text should be read on tape by two speakers, preferably a male and a female voice changing with each paragraph. The Aboriginal words (in italics) should be written on the board before the tape is played. The tape should be played twice.

Not everybody knows that the name for the national capital comes from an **Aboriginal** word. "***Kamberra***" or "***nganbirra***" means "meeting place" or "a woman's breast", possibly hinting at the shapes of Mt Ainslie and Black Mountain. But the Canberra of today that nestles around these ancient hills is rather a living proof of the region's **white** history.

This history is very young. 150 years ago the first sheep farmers came to the area. And only in 1913, Canberra's life as the national capital began. Since then, modern architecture and technology have changed the landscape so drastically that an Aboriginal visitor from Arnhem Land stated: "This country has lost its dreaming". It had lost most of its Aboriginal people, too. Already around 1900, nearly all the Aborigines of the region had died out.

The 500 to 700 Aborigines from the ***Ngunnawal*** tribe who traditionally inhabitated the cold plains around the ACT were highly nomadic. They could only survive because they were in tune with the seasons and knew intimately the local animals and plants. They lived on freshwater fish and crayfish, possums and kangaroos and, most distinctively, the Bogon moths. In the spring-time, when the Bogon moths arrived in the south eastern highlands, hundreds of Aboriginals from a wide area travelled to the mountains for moth hunting, ceremonies and feasts.

White settlement devastated the Aboriginal population of the ACT. Many died from new diseases such as measles and tuberculosis. Traditional hunting and gathering patterns were disrupted. Fences cut through the tribal land. Kangaroos and possums were hunted down with relish for sport and pleasure. Some pioneers saw the Aborigines themselves just as another native pest. Their demise would cause no mourning. In a very short time span, 21000 years of traditional lifestyle and culture had been wiped out.

Today descendants of the ***Ngunnawal*** people still live in and around Canberra. And more and more of the sites, tools and rock paintings of their ancestors have been rediscovered all through the region. Unfortunately, the main Aboriginal campsite of the Canberra city area, at ***Pialligo***, is now buried under a rubbish dump and a plant nursery. But you can visit a number of restored sites in ***Namadgi*** National Park, walk along an Aboriginal trail in the Botanical Garden, and see Aboriginal works of art and other artefacts, not only from the Canberra region, displayed in in the National Gallery.

There, on the ground floor, you will find the perhaps most impressive of them all, the Aboriginal Memorial. It is a forest of 200 tall upright wooden tubes painted with Aboriginal motives. They are hollow log coffins as used in Arnhem Land for burial. Aboriginal artists from this area created the Memorial in 1988. It reminds of all the Aboriginal people who, since 1788, lost their lives in defending their land.

Some people believe that an art gallery is not the right place for the Memorial. Perhaps, one day, it will be relocated in the open in the middle of Canberra, and commemorate there the reconciliation of indigenous and not indigenous Australians. Perhaps.

Dep. of Aboriginal Affairs: Aboriginals of the Canberra region. Woden ACT
Guy Freeman: Canberra Cosmos. Primavera 1995.

CANBERRA: THE BLACK SIDE

You will listen to some information about Canberra that you won't find on the first page of tourist brochures. Listen carefully and record your first thoughts and feelings:

Listen again and take some notes. What can you find out about

- the name of the national capital

- the lifestyle and history of the Ngunnawal people

- Aboriginal sites in the Canberra area

- the Aboriginal Memorial

Which of all the information you have read and heard about Canberra did you find most interesting? Why?

If you would visit Canberra, where would you go? Why?

DECIDE ON PLACES TO GO

Help your friends to plan their holiday weekend

day/time	places/location on map	What's there to see and to do?
Friday		
Saturday		
Sunday		
Monday		

CHOOSE A PLACE TO STAY

Look through a list of hotels, motels and caravan parks. Which place seems to be best for your friends? Consider price, comfort and location.

Name:

Address:

Phone:

Give reasons for your choice:

You need to ring up to enquire. **Make a list of questions** you would like to ask:

Practice the telephone conversation with your partner before ringing up. Take notes while you are listening.

HOW MUCH WILL IT COST?

Help your friends to budget for their weekend. What will they approximately have to spend if they go ahead with your suggestions?

You can assume that they will mostly travel in their own car, but sometimes will have to use bus and taxi as well. There are, of course, many other things to pay for - check whether the list below covers them. Add more to it if necessary.

Fill in the table by estimating your friends' expenses.

	Friday	Saturday	Sunday	Monday	**TOTAL**
travel by car (25 cents per km)					
accommodation					
meals and refreshments					
fares (bus/taxi)					
admission fees					
entertainment					
souvenirs					
other expenses					
TOTAL					

How would you rate this weekend?

( ) **A BARGAIN** — most people could afford this.

( ) **STILL AFFORDABLE** — for the ordinary wage earner.

( ) **OUT OF REACH** — you will have to win the lottery first.

A LETTER OF REPLY

Let your friends know what you found out for them, and summarise the most important information in a letter of reply. You can include reference material (your itinerary, travel brochures) if you wish.

Give your letter an introduction, a body and a closure, and set it out in paragraphs.

Make a draft first and work on it. Write your final copy in the space below.

A WELCOME TO OUR 5 MILLIONTH AND ONE VISITORS FROM JAPAN

Tetsuya and Kimiko Yamada, married in Japan on Sunday, found they had become celebrities when they arrived at Brisbane airport at 6 am yesterday after an eight-hour flight. And no wonder the cameras were there to greet them - the honeymooners are the 5 millionth and one Japanese visitors to Australia.

While it has taken 50 years for 5 million visas to be issued to Japanese visitors, tourism authorities estimate it will take only about another five years for the 10 millionth visitor. By 2000, it is expected there will be 1.2 million high-spending Japanese tourists a year.

Mr and Mrs Yamada, who will spend three nights on the Gold Coast, two in Melbourne and three in Sydney, estimate the cost of their air fares and honeymoon - including the many presents they will buy - will be 1.5 million yen ($ 20,000). Mr Yamada, 27, is an office worker from Ibaragi City in Osaka prefecture, and Mrs Yamada, 25, will be a housewife.

According to the Sydney Convention and Visitors Bureau Japanese representative, Mr Junzo Tamai, the main reason for the record expansion of travelling abroad is the strength of the yen.

Although Australia is the most popular long-haul destination for Japanese tourists, its 720,000 visitors a year (at present) is a relatively low market share of the record 13.58 million Japanese travellers.

The Joint Standing Committee on Migration is expected to report soon on whether Australia will change its universal visa requirement, which is cited as an impediment to tourism.

(Sydney Morning Herald 23/11/95)

Glance quickly over this article. Which statement summarises best the main idea?

1. Holidays in Australia are very expensive for Japanese tourists.
2. Tourism from Japan is an important growth industry in Australia.
3. There are too many tourists from overseas in our country.

Read carefully and answer these questions:

1. How many years has it taken to attract 5 million Japanese tourists?—*Work out the yearly average!*
2. When is the 10 millionth Japanese visitor expected?—*This will mean how many visitors per year on an average?*
3. How long will Mr and Mrs Yamada stay in Australia, and how much money are they going to spend?—*This is roughly how many times your weekly income?*
4. How many Japanese tourists are visiting Australia per year at present? - *This is ( ) less than 1 % ( ) less than 10 % ( ) more than 10 % of all Japanese travellers.*
5. How do Australian visa requirements affect tourism from Japan?

Discuss: What are the benefits, what are the negative aspects of tourism?

ENVIRONMENT *jobs* **higher prices** casino *infrastructure* ECONOMY *litter* *development* *noise* pollution **ALCOHOL** **trade** MULTICULTURALISM **YEN** inflation market share **crime** **souvenirs** traditional lifestyle *adventure* ***CUSTOMERS***

TOURISM - BLESSING OR CURSE?

Tourism creates jobs and contributes to economic growth - but with it come shopping centres, tourist resorts, roads and other development projects that change the environment and the lifestyle of the local residents, not always for the better.

Role play the following scenario:

A futuristic multimillion dollar tourist resort is proposed in the rural outskirts of Canberra (or in a popular recreation area close to your own community). A US investor has shown interest, and a majority in the local government is inclined to give the project the go ahead. The local community is divided over the issue. The community radio station has invited the following people to a discussion:

Resident (1)

You are a construction worker who has been out of work for a long time, and you are looking forward to employment at the new building site. Your sister is a shop owner and keen to get new customers.

Resident (2)

You know about Aboriginal sites in this region, and you are concerned that the development will change the area completely.

Environmentalist

Your group has researched the flora and fauna of this area. You've found the legless lizard, a very rare reptile, and wish to see this and other native species protected.

Resident (3)

You have brought up your children in this area and you want to spend the rest of your life here. How will life change for you with this development?

Tour Operator

You hope the new resort will bring a boom for your business. And you argue that tourists have a right to the best service possible!

Government Official

You believe that the benefits of the new project will by far outweigh its negative aspects, and that the local community will benefit from economic growth that will come with it.

Journalist

You have to facilitate the discussion and to make sure that everybody can get their point across.

Overseas tourist

You welcome the comfort and the convenience of a new resort, but you are concerned that you won't be able to afford this.

Choose one of the following writing tasks:

1. Write a 'letter to the editor', expressing one of the viewpoints of the role play.

2. Write an article for the local paper about the radio discussion.

Acknowledgment for this idea to J. Bell: *Integrated Skills/ upper intermediate* p48, Heinemann 1990

THE WORLD

Find out about another country that interests you.

Some other students may have knowledge about the country. If not, where else can you get information?

Here are some questions you might ask.

What is the country?

What are neighbouring countries ?

What is the population ?

What is the weather like?

What language is spoken there ?

What is a food that is popular there?

What is the national sport ?

What is the currency ?

Who is the head of the government? How is she/he chosen?

Who is a famous personality from your country?

There are countless others you could include … Ask whatever questions interest you most …

REPORT BACK TO THE CLASS.

THE WORLD

ORIGINS

This is a co-operative logic problem. The statistical information comes from the 1986 census conducted by the Australian Bureau of Statistics.

Instructions:

Origins requires students to arrange twelve ethnic groups living in Australia in order of size. All the statistics refer to people who live in Australia but were born overseas.

It can be played in a group of up to eight students.

All eight clue cards are necessary to find the solution.

Encourage students to place the cards on the table, and move them around until the group reaches a solution.

Preparation:

Make one copy of the problem for each group of students. Cut out the clue cards, and store each problem in an envelope.

Ref: Allan, L (1990) in Lord, S. and Lester, P. (eds) *Numeracy: More Than Numbers*

VIETNAM	MIDDLE EAST	SCOTLAND
ITALY	IRISH REPUBLIC	AFRICA
YUGOSLAVIA	NEW ZEALAND	INDIA
GREECE	SOUTH AMERICA	LEBANON

ORIGINS

PROBLEM: Arrange the twelve ethnic groups in order from largest to smallest.

Everyone must read this card.

CLUE CARD: ORIGINS

This clue will help to solve the group's problem. Read it to the group but do not show anyone.

- The only two groups larger than the Yugoslavians are the New Zealanders and the Italians.
- There are 108,547 African-born people living in Australia.

CLUE CARD: ORIGINS

This clue will help to solve the problem. Read it to the group but do not show it to anyone.

- The numbers of Greeks and Middle Eastern Australians are smaller than those born in Scotland.
- Lebanese-born Australians number 56,341.
- There were severe droughts in India last year.

CLUE CARD: ORIGINS

This clue will help to solve the group's problem. Read it to the group but do not show it to anyone.

- Eleven groups are larger than the Irish Republicans.
- 83,044 Vietnamese-Australians were born overseas.

CLUE CARD: ORIGINS

This clue will help solve the group's problem. Read it to the group but do not show it to anyone.

- New Zealanders are a larger group than the Scottish, but smaller than the Italians.
- Many western countries are limiting sporting and trade ties with South Africa because of its racist policies.
- Five groups are smaller than Africa.

ORIGINS

CLUE CARD: ORIGINS

This clue will help to solve the group's problem. Read it to the group but do not show it to anyone.

- The five largest groups are people born in Yugoslavia, Greece, Italy, New Zealand and Scotland but not necessarily in that order.
- Indian-born people number less than the Vietnamese and Lebanese, but more than the South Americans.

CLUE CARD: ORIGINS

This clue will help to soive the group's problem. Read it to the group but do not show it to anyone.

- In Australia there are twice as many people born in the Middle East as were born in Lebanon.
- Numbers for all of South America, Africa and the Middle East were included because we could not get information about individual countries in these areas.

CLUE CARD: ORIGINS

This clue will help to solve the group's problem. Read it to the group but do not show it to anyone.

- There are about 10,000 more Lebanese than South American Australians.
- Lebanon is still at war.

CLUE CARD: ORIGINS

This clue will help to solve the group's problem. Read it to the group but do not show it to anyone.

- The smallest groups are the Irish Republicans, South Americans, Indians, Lebanese, and Vietnamese, but not necessarily in that order.
- The Italians are the largest group in Australia.

OFF YOU GO ...

You've heard about a number of different countries.

Choose a destination - a place that you'd like to visit and maybe spend a year or so ... and plan a trip ...

What do you need to know before you're ready to go ?

Will you need a passport ...

visa ...

what else ...

Where can you get this information?

Cost the tickets ... How will you do this?

What time of year do you get the best price?

What's the difference in price between 'high' and 'low' season?

Are low fares really **always** a bargain? Explain.

(for example, the weather may be really awful in low season.)

A DOLLAR IS A DOLLAR ... or is it????????

Fred Jacobs came to Australia from South Africa. There's lots he likes about his new home, but he's concerned about the current exchange rate of South African rands for Australian dollars.

This is what he says:

"The worst thing is that the rand is worth so little against the Australian dollar. If you earn a rand in South Africa, it's like earning a dollar here. But if you bring your rands into Australia, at the current exchange rate you'd only get $35 for every -100 rand. We lost a tremendous amount of money and we basically had to start again. From owning a house in a good suburb in Cape Town, we are back to mortgages."

Jacobs says Australia is now home and he would not go back.

JANE FREEMAN

SMH 5/12/95

CURRENCY

What is the currency of the country you've chosen to visit?

Look at the table below dated dated 4 December 1995.

EXCHANGE RATES

Source: Westpac. (n/a to currency notes)

	Dec 1		Dec 4	
	Buying	Selling	Buying	Selling
USA, $US	0.7435	0.7385	0.7394	0.7344
SAI for $US1	1.3449	1.3540	1.3524	1.3616
UK, £stg	0.4862	0.4796	0.4835	0.4770
SAI for £1stg	2.0567	2.0850	2.0682	2.0964
Japan, Yen	76.14	74.80	75.04	73.71
Austria, schilling	7.62	7.46	7.57	7.41
Belgium, franc	22.26	21.80	22.11	21.66
Canada, $C	1.0133	0.9957	1.0126	0.9950
China, yuan	n/a	n/a	n/a	n/a
Denmark, krone	4.1701	4.0973	4.1415	4.0691
Fiji, $F	1.0691	1.0391	1.0667	1.0367
Finland, markka (Fmark)	3.2003	3.1435	3.1767	3.1202
France, franc	3.7195	3.6541	3.6975	3.6324
Fr Pacific, franc	67.93	66.06	67.91	66.04
Germany, Dmark	1.0821	1.0633	1.0710	1.0524
Greece, drachma	177.46	174.44	176.03	173.03
Hong Kong, $HK	5.7774	5.6780	5.7464	5.6474
India, rupee	25.779	24.616	25.636	24.480
Indonesia, rupiah	1708.0	1664.0	1701.0	1657.0
Ireland, punt	0.4704	0.4617	0.4680	0.4593
Italy, lira	1197.0	1167.0	1189.0	1159.0
Malaysia, $M	1.8925	1.8604	1.8774	1.8455
Netherlands, guilder	1.2053	1.1845	1.1950	1.1743
NewZealand, $NZ	1.1350	1.1279	1.1315	1.1244
PNG, kina	0.9877	0.9500	0.9823	0.9448
Philippines, peso	n/a	18.877	n/a	18.772
Portugal, escudo	112.91	110.88	112.19	110.17
Saudi Arabia, riyal	2.8020	2.7335	2.7865	2.7183
Singapore, $S	1.0545	1.0362	1.0470	1.0288
South Africa, rand	2.7445	2.6842	2.7342	2.6741
Spain, peseta	91.91	90.30	91.50	89.90
Sri Lanka, rupee	n/a	0.09	n/a	38.64
Sweden, krona	4.8830	4.7983	4.8359	4.7520
Switzerland, franc	0.8773	0.8619	0.8706	0.8553
Thailand, baht	18.80	18.41	18.71	18.31
Vanuatu, vatu	85.19	83.03	84.71	82.57

$US HEDGE RATE - The U.S. dollar settlement rate based on spot rates set by trading banks at 9.45 am yesterday was: 0.7397 (0.7439).

SMH 5/12/95

From this table find out what is the exchange rate for your country.

Find the exchange table in a current newspaper.

How has it changed - gone up or down? Why?

BEST COPY AVAILABLE

POPULATIONS

KEY: 1 million

0.5 million

How many people?

1 Santiago

2 Mexico City

3 Baghdad

4 Dublin

5 Melbourne

Draw the stick people to represent these populations:

1 London 6.8 million

2 Sydney 3 million

3 Singapore 2.5 million

4 Hanoi 1 million

5 Moscow 8 million

Strength in Numbers: Goddard, Marr, Martin 1991

POPULATIONS

Look at the next page

1. From this table, how many people live in Australia? _____

2. Which country has the most people? _____

3. Write down the countries in order of size. Start with the country with the biggest population.

COUNTRY	POPULATION
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

4. These population figures are not today's figures.

   Where would you find out the real population of these countries?

POPULATIONS ARE MULTIPLYING

KEY: 1 million 0.5 million

AUSTRALIA

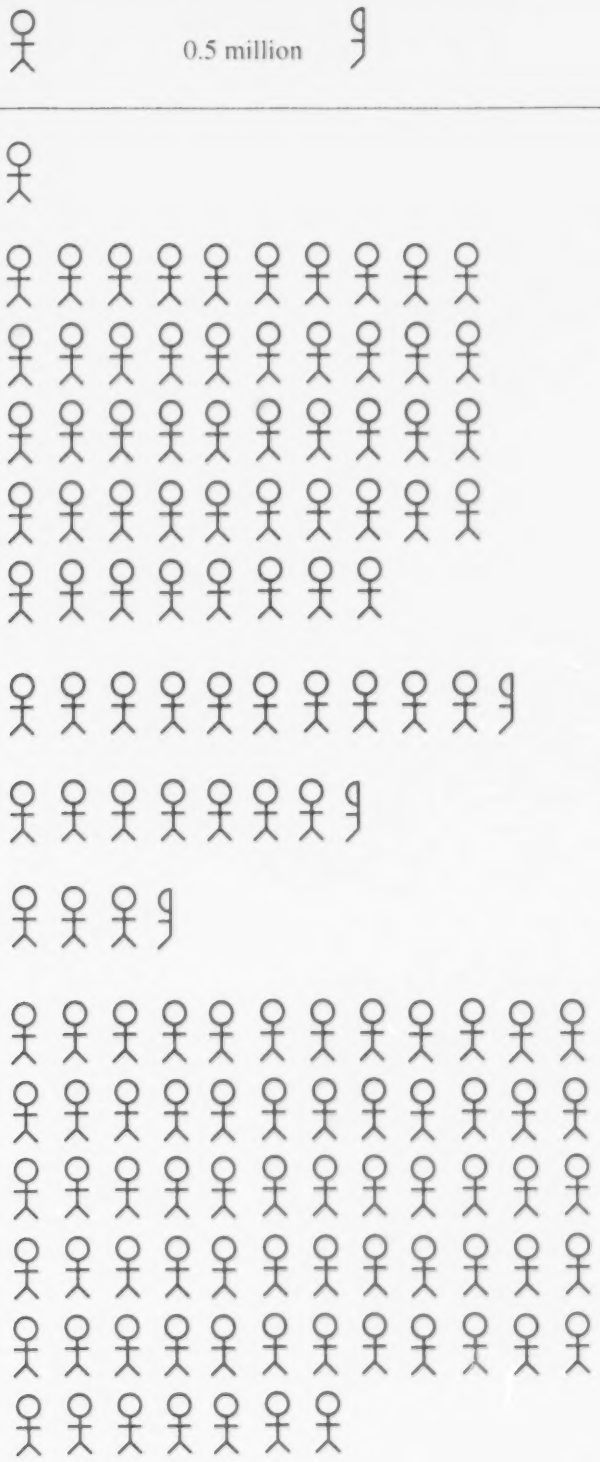
INDIA

INDONESIA

JAPAN

PHILLIPINES

CHINA



adapted from *Strength in Numbers*: Goddard, Marr, Martin 1991

A NICE PLACE TO LIVE

There are advantages to living here in Australia and there are advantages to living elsewhere.

Complete this table:

ADVANTAGES

LIVING IN AUSTRALIA	LIVING ELSEWHERE

What do you think? Write your opinion about where you think would be an ideal place to live.

SECTION 8

JUGGLING POOL

Juggling Pool ... from a new angle

LEARNING OUTCOMES

In the context of this study students will:

- set personal goals
- set literacy and numeracy goals
- gather information and mathematical data
- interact with others and in groups
- reflect on learning
- perform procedures
- gather information and mathematical data from texts
- present information and mathematical data in texts
- use mathematics creatively
- use language creatively
- use technology
- solve problems
- increase confidence and participation
- make choices.

TOPICS

Language/Literacy

- genre - procedural writing

Numeracy

- angles
- mathematical language
- spatial relationships

RESOURCES

- teacher notes 1-4
- handouts 1-8
- pamphlet Dickins, E. Juggling with Red Giraffe (included) and available from Red Giraffe Ltd., 111 Gloucester Street, The Rocks

to be supplied by teacher:

- protractors
- rulers

FUTURE DIRECTIONS

- other student skills (eg refer 'Countries' worksheets 8, 9)
- research history and practice of games (refer handout 8)
- research rules for playing pool in Australia.

	Activities	Resources	Assessment
Introduction	**What are you good at?** • brainstorm skills that students have • write procedures for these skills (first draft) • brainstorm other areas for procedural writing	teacher notes 1	production of first draft
Language/ Literacy/ Numeracy	**Can you juggle?** • model a set of instructions for juggling • practise juggling • discuss schematic structure of text • revise students' own procedural text	teacher notes 2 handout 1 handout 2, 3, 4	completed handouts
Language/ Literacy/ Numeracy	**Can you play pool?** • excursion to local pool tables • discuss mathematical language of pool playing • measure angles • jointly construct procedural text for playing pool • critically analyse why angles are measured	handouts 5, 6, 7 teacher notes 3 (refer to previous work on juggling) teacher notes 4	participation in discussion

	Activities	Resources	Assessment
Language/ Literacy/ Numeracy Reflection	• How can other procedural texts be written so that they are easier to understand? • When do you need to read written procedures? Why?	eg. TAFE student booklet	

The concept for this section was developed by Sue Sim and Michael Keating.

JUGGLING POOL

Discussion and Brainstorm

Brainstorm the range of expertise amongst the students, particularly focussing on areas that require a physical skill. Discuss the skills involved in recreational activities such as basketball, pool playing, cardgames etc. Highlight mathematical skills such as estimating angles for basketball and pool playing. Discuss how these skills could be taught through a series of procedures.

Small group work

Students can try to teach each other their skill, firstly through discussion and then by trying to write down the instructions. Remind them that this will be a first draft that will be altered as they gain more expertise in procedural writing.

Students can then report back to the whole group.

CAN YOU JUGGLE?

Model a procedural text

Use the juggling instruction booklet (handout 1) to model a procedural text. Highlight features of its schematic structure including:

- position of the imperative in the text
- use of numbers or other symbols to introduce information
- desktop publishing features such as font, size and layout.

Practise Juggling

Try juggling !!!

You and your students will have fun trying to juggle. This is a great opportunity for the teacher and the students to try something new together.

Look back at the instructions (handout 1) and complete handouts 2,3,4

Revise students' own procedural texts.

JUGGLING WITH RED GIRAFFE
THE ANCIENT ART REVEALED

In an age where quality leisure time is becoming more sought after, juggling is making a remarkable comeback.

As a sport juggling improves your mental and physical agility, promoting muscle tone, co-ordination, concentration, stamina, reflexes and plenty of laughter which are vital in everyday living. What's more, it can be practiced almost anywhere by almost everyone.

The Ancient Egyptians were at it back in 4000 BC and today all walks of life are engaging in the ancient art whether it be for fun and entertainment, stress management or improving life skills. Juggling is absorbing, addictive, surprisingly strenuous and has to be tried!!

Handy hints for beginners

- Find a peaceful environment with flat ground.
- Find your centre of balance and keep good posture.
- Keep your hands at shoulder width apart and forearms parallel to the ground.
- Proceed one step ahead in your own time.
- Get the balls to go into your line of vision-approximately 10cm above your head.
- Learn from your mistakes.
- Practice in front of a bed but don't bend down.
- If you tend to throw ahead of yourself, practice in front of a wall.
- Allow your left and right to develop. Alternate starting with your stronger and weaker side.
- Remember, practice makes perfect.
- Relax and have fun. Enjoy the experience!!

JUGGLING WITH RED GIRAFFE

The Three ball cascade

Refer to Handy Hints

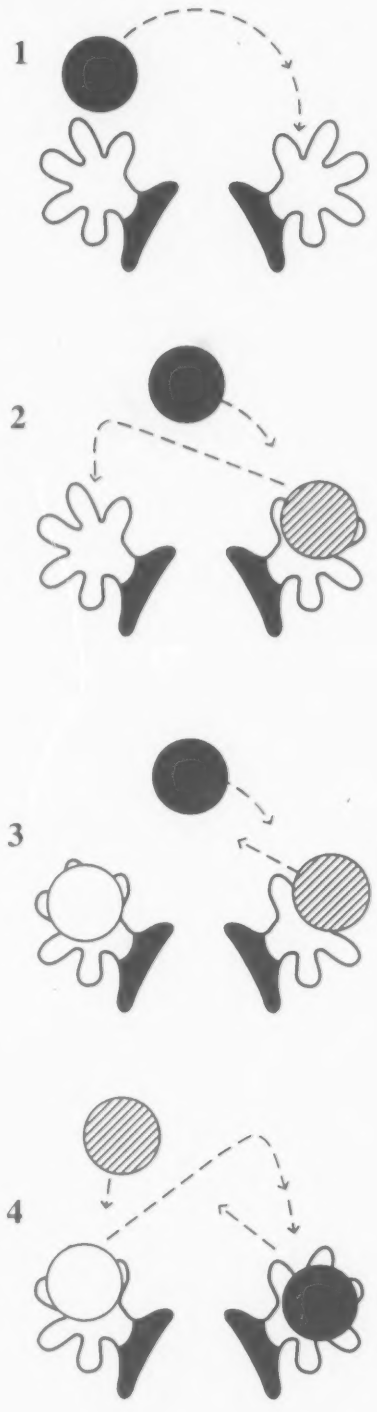
One ball—Throw the ball from hand to hand, aiming for a defined peak about 10cm above your head. The catch should be smooth without having to move your hands. Continue until throw is even, controlled and confident.

Two balls—one ball per hand. Toss the first, when it reaches its peak, throw the second ball thus making a figure eight (oo). Always throw to the inside. The balls should peak at the same height. This is the hardest stage in the 3 ball cascade and once mastered, most of the work has been done. Be sure to have exchange mastered before moving on.

Three balls—two balls in your strongest hand and one in the other. At first, repeat step 2 without releasing the third ball. Always start with the hand with two balls. To introduce the third ball, throw it when the second ball has reached its peak. OK... you've achieved your first complete exchange —you're juggling!! To keep the balls in motion just keep on throwing in this fashion, always waiting until the previous ball has reached its peak before throwing the next.

Counting 1–2–3–4–5 ... with your throws helps keep timing.

Keep it slow.



JUGGLING WITH RED GIRAFFE

Three ball tricks

The three ball cascade soon looses its fascination. You need something more challenging, but four balls may be one too many at the moment. Here are a few moves to get you on your way.

To start—toss two balls simultaneously from the same hand. As they peak, introduce the third ball as usual.

Fancy but simple moves include throwing under your leg or over your shoulder. When attempting these moves always throw the previous ball higher—this gives you more time.

Ping Pong—try throwing over each descending ball instead of under. (see figure 2).

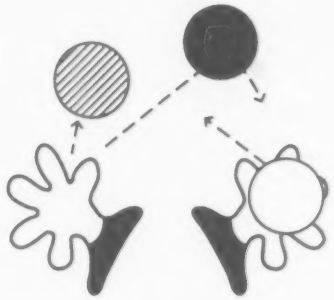
Fountain—throw one ball vertically. As it peaks throw the other two so they cross paths as they peak. (see figure 3)

Shower—A very effective move requiring quick hands. Start with two balls in your strongest hand and throw in quick succession. Then pass the third ball to your empty hand. (see figure 4).

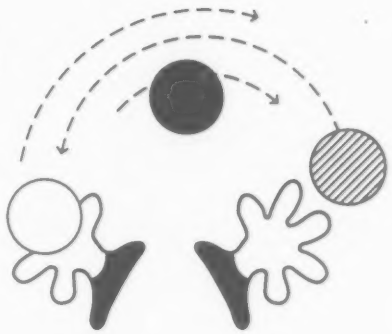
Another method of catching the descending balls is to snatch them—your palms will be facing down.

To finish—pass one ball to the other hand whilst the third ball is still in the air.

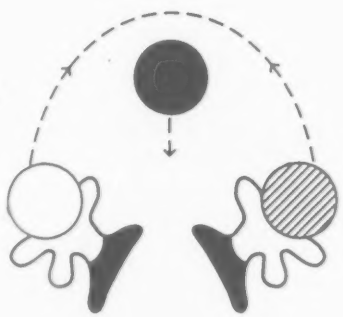
1



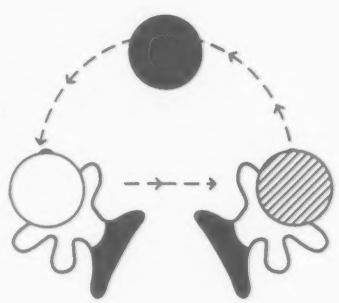
2



3



4



JUGGLING WITH RED GIRAFFE

Four balls—the challenge is on...

Before you start, here are some warm up and practice exercises.

Throw balls simultaneously, ensuring they peak at the same height. (see figure 1)

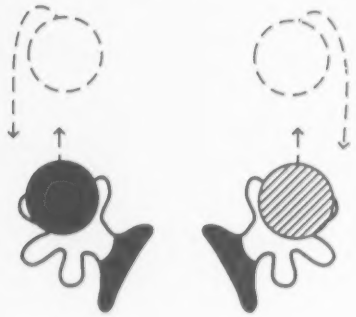
Two balls in one hand—throwing in a circular pattern from the inside to outside. (see figure 2)

Ready!! When juggling 4 balls the same two balls will remain in that hand—they do not cross over. The effect is simply achieved by throwing alternately.

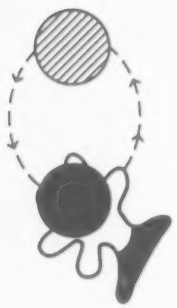
Keep your hands low—resist reaching up for the balls.

Concentrate on keeping the two sides separate—this reduces risk of collision.

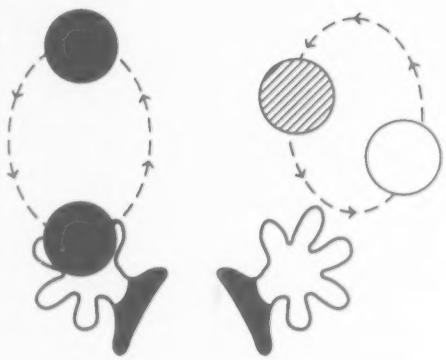
1



2



3



Source: *Juggling with Red Giraffe: The Ancient Art Revealed.*

IMPERATIVE

A verb that expresses a command.

***Find** a peaceful environment with flat ground.*

***Find** your centre of balance and keep good posture.*

***Keep** your hands at shoulder width apart and forearms parallel to the ground.*

***Throw** the ball from hand to hand.*

Find, Keep and ***Throw*** are imperatives.

HANDY HINTS FOR BEGINNERS

Fill in the missing words.

Choose from the words below.

- _____ a peaceful environment with flat ground.
- _____ your centre of balance and keep good posture.
- _____ your hands at shoulder width apart and forearms parallel to the ground.
- _____ one step ahead in your own time.
- _____ the balls to go into your line of vision - approx 10cm above your head.
- _____ from your mistakes.
- _____ in front of a bed but don't bend down.
- If you tend to throw ahead of yourself, _____ in front of a wall.
- _____ your left and right to develop. Alternate starting with your stronger and weaker side. Remember, _____ makes perfect.
- _____ and have fun _____ the experience.

relax, find, keep, enjoy, learn, get, proceed, allow, stand, practice

THE THREE BALL CASCADE

Fill in the missing words.

Choose from the words below.

One Ball—

_____ the ball from hand to hand, _____ for a defined peak about 10cm above your head. The catch should be smooth without having to move your hands. _____ until throw is even, controlled and confident.

Two Balls—one ball per hand

_____ the first, when it reaches its peak _____ the second ball thus making a figure 8. Always _____ to the inside. The balls should peak at the same height. This is the hardest stage in the 3 ball cascade and once mastered, most of the work has been done. Be sure to have exchange mastered before moving on.

Three Balls—two balls in your strongest hand and one in the other

At first, _____ step 2 without releasing the third ball, always _____ with the hand with two balls. To introduce the third ball, _____ it when the second ball has reached its peak.

OK... you've just achieved your first complete exchange—you're juggling!!

To keep the balls in motion just keep on _____ in this fashion. Always _____ until the previous ball has reached its peak before throwing the next.

_____ 1–2–3–4–5... with your throws helps keep timing.

_____ it slow.

throw, repeat, toss, start, throwing, waiting, keep, continue, aiming, counting

POOL PLAYING AND ANGLES

Measuring the angle of the cue (white) ball

Look at handout 6

Step 1

Draw a line (solid line) from the centre of the ball you want to sink to the centre of the pocket (ball 1 and ball 2).

Make sure the line comes back through the ball. and out the other side (see diagram).

Step 2

Draw a picture of where the cue ball should be to sink your ball. It should be directly behind the ball so the centre of the cue ball lines up with the centre of the ball to be sunk and the centre of the pocket.

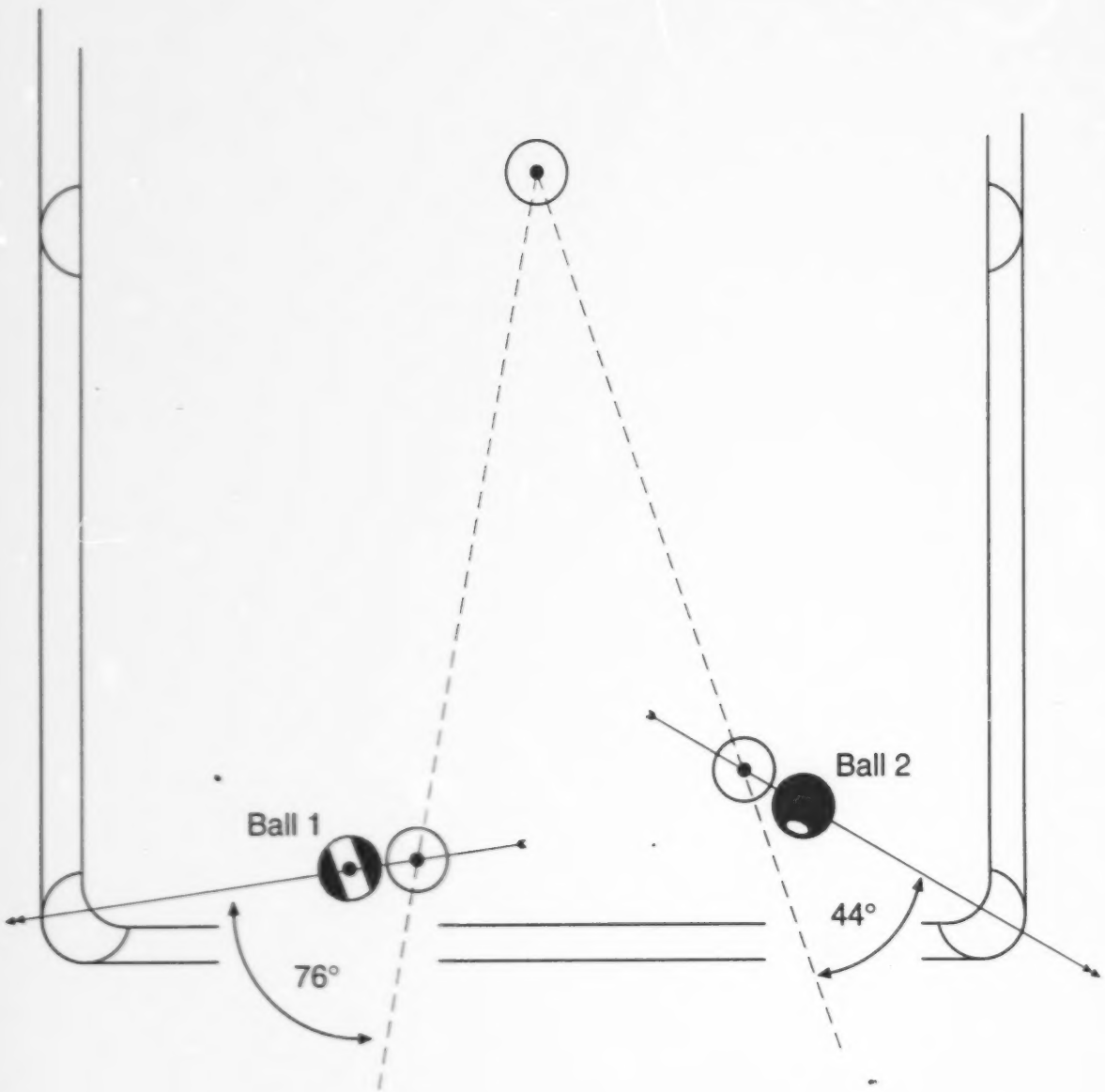
Step 3

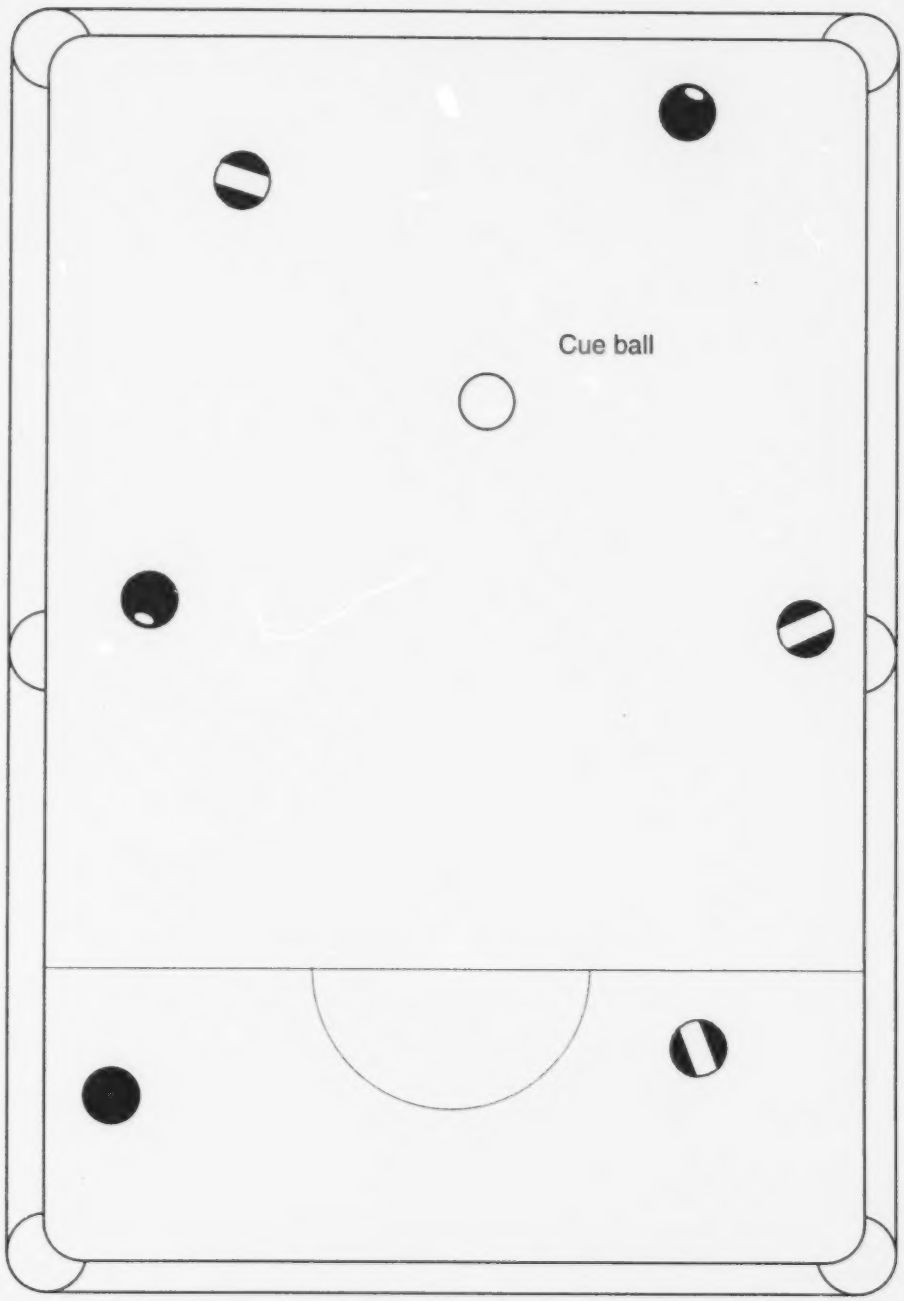
Draw a line (dotted line) from the centre of where the cue ball actually is to where you need to place it to sink your ball.

Step 4

Measure the angle created by the line of the shot. This is the angle of your cue stick relative to the direction of the ball as it travels toward the pocket.

Follow steps 1–4 with the balls on handout 7.
Compare your results with other students.


Ball 1
Ball 2
76°
44°


Cue ball

POOL PLAYING AND ANGLES

Why measure angles ?

When students have completed handouts 5,6 and 7 (or perhaps even whilst they are completing them !) encourage a discussion about why they are measuring the angles.

Here are some questions that may arise.

- Why are we measuring these angles ?
- Would we measure these angles when we are playing a game of pool ?
- Does knowing the size of the angles improve our pool playing ? Why/why not ?
- Are there other ways to improve our pool playing ?
- Are there other sports or areas of recreation where it is important to know the angles ? How can they be measured ?

Encourage the students to critically analyse why they are doing this mathematical task (ie measuring angles) and if it is useful/helpful/easier to measure angles in a real life context.

CAN YOU PLAY POOL?

Joint Construction

Ask one of the students to scribe at the blackboard while the class brainstorms all relevant information to go into the instructions.

Review the relevant mathematical information and language to be included in the instructions.

Discuss the appropriate audience for the text and confirm the relevance of the language and information. Use the expertise amongst the students.

Develop a set of class instructions for playing pool based on knowledge gained from **Can you juggle?**.

BILLIARDS

All billiards games are played on a rectangular, slate-topped table twice as long as it is wide and covered with a felt cloth. The playing area is surrounded by rubber cushions, or rails. Two basic types of billiards exist: pocket billiards, also called pool, on a table with six pockets, and carom billiards, usually on a table with no pockets.

Pocket Billiards

Pocket billiards requires cue sticks, a white cue ball, and in the United States, 15 object balls numbered 1-15 (1-8, solid; 9-15, striped).

The most popular U.S. pocket billiards game, called 14.1 continuous or straight pool, is for 2 players only. The game begins with the 15 object balls racked unordered in a triangle. The player who begins, or breaks, strokes the cue ball and must drive 2 or more object balls to a cushion or at least 1 object ball into a pocket. After that, each player attempts to make a continuous run of balls, in any order, until only 1 object ball remains on the table. The 14 balls are then racked again, with a space left at the head of the triangle. The player who pocketed the 14th ball now attempts to pocket the 15th and scatter the racked balls. Before each shot a player must call the shot, that is, identify ball and pocket. Each turn taken is called an inning. One point is scored for each successful shot, and a game is usually to 150 points.

Another pocket billiards game is rotation, in which the object balls are racked in order—the number 1 ball at the apex of the triangle and so on. Each ball must be pocketed in order and is worth its face value. The player or team to reach 61 points or more wins.

A variation of rotation is nine ball, which, from the early 1980's, rivalled straight pool in U.S. popularity. Only balls 1-9 are used, racked in a diamond with the number 9 ball in the centre and the 1 ball at the apex. On all shots the cue balls must first strike the lowest-numbered ball on the table; the player who pockets the 9 ball wins.

Eight ball, the game most played on coin-operated tables, begins with the number 8 ball racked in the centre of the triangle. After the break, 1 player (or team) shoots only at balls 1-7 (solids), the other player only at 9-15 (stripes). After a player pockets an entire group, the 8 ball must be pocketed to end the game.

In Great Britain snooker is the most popular billiards game. It uses 21 object balls: 15 red (worth 1 point each) and 1 each of yellow (2), green (3), brown (4), blue (5), pink (6), and black (7). A player must first pocket a red ball, then a "colored" one, then a red, and so on. Each colored ball is respotted on the table, however, until all the reds are off; then the colored balls must be pocketed in ascending order. The player with the most points wins.

Carom Billiards

The most popular form of carom billiards is three-rail billiards, played with two white balls and one red on a pocketless table. To score a point a player must stroke the cue ball (one of the white balls), and it must hit one of the other balls and at least three cushions before hitting the second ball. The cue ball may also strike the other two simultaneously as long as it has already hit at least three rails. Games are usually played to 50 points.

In straight-rail billiards the cue ball must strike the other two but not necessarily any rails. English billiards is played on a somewhat larger table, with pockets, and with some rule variations.

History

Billiards is of unknown origin, but the game was played in 16th-century England. The word billiards is derived from the Old French billart, "curved stick." The Billiard Congress of America, in Iowa City, Iowa, sanctions U.S. play. The greatest U.S. players were Willie HOPPE (three-rail) and Willie MOSCONI (straight pool).

Bibliography: Byrne, Robert, Byrne's Standard Book of Pool and Billiards (1987); Cottingham, Clive, Jr., The Game of Billiards (1967); Daly, Maurice, Daly's Billiard Book, ed. by William W. Harris (1971); Hoppe, Willie, Billiards As It Should Be Played (1941; repr. 1977); Mosconi, Willie, Winning Pocket Billiards, (1965)

Comptons Interactive Encyclopedia 1995, Comptons News Media.

SECTION 9

BANKING

Banking ... more for your money

BEST COPY AVAILABLE

LEARNING OUTCOMES

In the context of this study students will

- set personal goals
- gather information and mathematical data
- reflect on learning
- perform procedures
- get information and mathematical data from texts
- present information and mathematical data in texts
- solve problems
- increase confidence and participation
- make choices

TOPICS

Language/ Literacy

- terminology used in banking
- genre - formal letter writing
- reading and understanding
- oral presentation

Numeracy

- percentage
- interpreting mathematical data from tables, texts and graphs
- critical numeracy

RESOURCES

- teacher notes 1-2
- handouts 1-3

to be supplied by students or teacher:

- Savings account brochures from different banks
- calculators

FUTURE DIRECTIONS

- credit cards, home loans, foreign exchange
- application forms to open a bank account.

	Activities	Resources	Assessment
Introduction Language/ Literacy/ Numeracy	**Saving your money** • brainstorm banking terms • discuss what to look for in savings account	whiteboard teacher notes 1	use of prior knowledge
Language/ Literacy/ Numeracy	**What do banks offer you** • analyse brochures in small groups • complete worksheet	handout 1 brochures from banks, building societies,etc OH transparency, markers, projector *each group should have brochures from only 1 bank	teacher observation of group discussions
Language/ Literacy/ Numeracy	• present relevant data, information to whole group	OH presentation	peer assessment group presentation
Numeracy	**How much interest?** • recap and revise percentages		student responses to questions
	• calculate interest on accounts	handout 2	check worksheet
Language/ Literacy/ Numeracy	• discuss and compare savings accounts from different banks	handout 3	group assessment

	Activities	Resources	Assessment
Reflection	**Why bank?** • analyse the place of banks in our society • will students continue to use banks? Why/why not?	teacher notes 2	

Additional activities

Lawrence, G. and Moule, J. 1990, *The Consumer, Mathematics in Practice* pp 11-13
Blom and Barin, *Everyday Maths* pp 78-83
Marr and Helme, *Maths – A New Beginning* pp FA1-FA20.

The concept for this section was developed by Maggie Sinclair.

PROMPT SHEET

Here are some banking terms you may want to discuss with students:

ATM

EFTPOS

savings

investment

debit

credit

building society

passbook

fixed term deposit

minimum monthly balance

FID

BANKING – SAVING ACCOUNTS

Which bank???

You have a selection of brochures from a bank—it might be Westpac, NAB, St George. What other banks can you think of?

Skim the brochures and answer the following questions.

Record your answers on the overhead transparency using the OH marker provided so that you can present your findings to the class.

1. Which bank do the brochures come from?

2. Look at the savings account. Does it have another name? What is the account called?

3. What are the current interest rates on this account?

4. How is this interest calculated? e.g. daily, weekly, etc.

5. When is interest paid?

6. What fees and charges apply to this account?

7. List any options or special facilities that are available with the account.

BANKING – CALCULATING INTEREST

1. You have some money in the account you have looked at (handout 1) for 1 year. How much interest would you earn and what would be the balance on this account for the following amounts:

money in account	interest earned p.a.	balance after 1 year
$100		
$200		
$550		
$21000		

2. Calculate the interest earned and the balance after 6 months if you had the following amounts in this account:

money in account	interest earned p.a.	balance after 6 months
$100		
$200		
$550		
$21000		

3. Calculate the interest earned and the balance quarterly if you had the following amounts in this account:

money in account	interest earned p.a.	quarterly balance
$100		
$200		
$550		
$21000		

BEST COPY AVAILABLE

Compare information from four different banks that have been looked at by students in the class and complete the following table:

SAVINGS ACCOUNTS

	1	2	3	4
name of bank				
interest rate				
when calculated				
when paid				
special fee				

Is there any other information you need to know about a bank before you make a choice?

Which bank best suits your needs? Explain why.

WHY BANK ?

Students should be encouraged to reflect on issues surrounding banks and their use. Questions that may arise include:

- Why do we use banks ?
- Why does our society have banks ?
- Who sets the interest rates ? How ? Why ?
- How do we have a say in the services offered by banks ?

Additional tasks that would reinforce students literacy skills could include:

(1) writing a formal letter to the bank manager:

- complaining about rude service from a teller
- asking about interest that has not been paid
- expressing concern about the closure of a local branch.

(2) interviewing bank personnel about

- taking out a personal loan
- currency exchange rates for a trip overseas
- getting a new cheque book
- interest rates and terms for a personal loan.

Students may wish to role play these interviews prior to going to the bank.

BIBLIOGRAPHY

Barclay, P. (1991). 'Critical Thinking in Adult Basic Education' *Good Practice in Australian Adult Literacy and Basic Education* 14: 10-11.

Barin, L. (1990). 'Numeracy: What has it got to do with literacy?', *Literacy Broadsheet*, Adult Literacy Information Office: Sydney.

Barin, L. (1991). 'I Can Teach Literacy but How will I ever be able to teach Numeracy?' *Literacy and Numeracy Exchange*, Winter no.1: 21-26.

Barry, B. & Schmid, V. (1991). *Calculators in the Classroom* Harcourt Brace Jovanovich: Sydney.
(available from Nepean Educational Specialists Penrith ph 047 311 759)

Bell, D. & Guthrie, S. (1994). *An Integrated Approach to Teaching Literacy and Numeracy* Foundation Studies Training Division: Western Sydney Institute of TAFE NSW.

Black, S. (1993). 'Critical literacy – the latest buzzwords' *Foundation Studies Training Division A.B.E. Newsletter* Term 4: 13-15.

Blom, D. (1987). 'An Integrated Approach to Developing Literacy and Numeracy Skills'. *Literacy Exchange*, Winter: 13-16.

Boud, D., Keogh, R. & Walker, D. (eds) (1985). *Reflection: Turning Experience into Learning*, Kogan Page: London.

Brademann, R. (1991). 'What's in the newspaper?' *Good Practice in Australian Adult Literacy and Basic Education* 14: 5-9.

Brosnan, D., Brown, K. & Hood, S. (1984) *Reading in Context: Developing the Reading Strategies of Adult ESL Learners* NSW Adult Migrant English Service: Sydney.

Brosnan, D. & Hood, S. (1985). *Press Matters* Cambridge University Press: Cambridge.

Brown, K. & Hood, S. (1989). *Writing Matters* Cambridge University Press: Cambridge.

Burns, A. (1990). 'Genre-based Approaches to Writing and Beginning Adult ESL Learners' *Prospect: a Journal of Australian TESOL* vol. 5 no. 3.

Callaghan, M. & Rothery, J. (1993). *Teaching Factual Writing: A Genre Based Approach* (includes three separate books on discussion, recount and report genres) Metropolitan East Disadvantaged Schools Program: Erskineville.
(available from DSP Bridge and Swanson Streets Erskineville 2043 ph 02 9517 6822)

Charles, R. & Lester, F. (1982). *Teaching Problem Solving: What Why and How*, Dale Seymour Publications: USA.

Derewianka, B. (1990). *Exploring How Texts Work*, Primary English Teaching Association:Sydney.
(available from Primary English Teachers Association Camdenville School Laura Street Newtown 2042 ph 02 9565 1277)

Fairclough, N. (ed.) (1992). *Critical Language Awareness*, Longman: Sydney.

Goddard, R., Marr, B. & Martin, J. (1991). *Strength in Numbers: a Resource Book for Teaching Adult Numeracy*, Holmesglen College of TAFE: Victoria.
(available from ARIS, NLLIA Level 3 112 Wellington Parade East Melbourne 3002 fax 03 416 0231)

Good Practice in Adult Literacy and Basic Education, Nos. 5 & 11, Adult Education: Tasmania.

Grundy, P. (1993). *Newspapers: a Resource Book for Teachers*, Oxford University Press: Hong Kong.
(available from Bridge Bookshop 10 Grafton Street Chippendale 2008 ph 02 9211 1660 fax 02 9211 1868)

Hammond, J., Burns, A., Joyce, H., Brosnan, D., & Gerot, L. (1993). *English for Social Purposes: a Handbook for Teachers of Adult Literacy*, National Centre for English Language Teaching and Research Macquarie University: Sydney.

Harris, P. (1991). *Mathematics in a Cultural Context: Aboriginal Perspectives on Space, Time and Money*, Deakin University: Geelong.

Healey, K. (ed.) (1990) *Issues for the Nineties* (a twelve volume compilation of texts about current issues from magazines and newspapers - see especially volumes 7, 8, 10, 12) Spinney Press, Australia: Wentworth Falls.
(available from Spinney Press Wentworth Falls 2782 ph 047 571 1641 fax 047 572 033)

Helme, S. & Marr, B. (1987). *Mathematics: a New Beginning*, State Training Board of Victoria: Melbourne.
(order from Teaching Maths to Women Project, Northern Metropolitan College of TAFE, St Georges Road Preston 3072)

Helme, S. & Marr, B. (1990). 'Mathematical Literacy' *Good Practice in Australian Adult Literacy and Basic Education* 11: 1–3.

Helme, S. & Marr, B. (1991). *Breaking the Maths Barrier: a Kit for Building Staff Development Skills in Adult Numeracy*, Department of Employment Education and Training: Canberra.
(available from DEET GPO Box 9880 Canberra 2601 ph 06 257 6933)

Helme, S. & Goddard, R. (1993). 'This Leads to That: A Model for Literacy and Numeracy Integration in an ABE Class' *Open Letter* Vol 4, No 1.

Hood, S. & Solomon, N. (1985). *Focus on Reading: a Handbook for Teachers*, National Curriculum Resource Centre: South Australia.

Johnston, B. (ed.) (1992). *Reclaiming mathematics. Background readings to accompany Breaking the Maths barrier: a kit for building staff development skills in Adult Numeracy by Beth Marr and Sue Helme*, Canberra: Dept of Employment, Education and Training.
(available from Language & Literacy Centre, University of Technology, Sydney)

Johnston, B. (1991). 'Why Include Numeracy in the Name of the Literacy Council'. *Literacy and Numeracy Exchange*, 1: 10-14.

Joshua, A. (1991). *Enrich-e-matics*, Longman Cheshire: Melbourne.

Joyce, H. (1992). *Workplace Texts in the Language Classroom*, NSW Adult Migrant English Service: Sydney.

Knapp, P. (1992). *Resource Book for Genre and Grammar*, Metropolitan, West Region Disadvantaged Schools Program: Sydney.
(available from Disadvantaged Schools Program cnr Bridge and Swanson Streets Erskineville 2043 ph 02 9565 1277)

Lee, A., Chapman, A. & Roe, P (1994). *Report on Pedagogical Relationships Between Adult Literacy and Numeracy*, University of Technology: Sydney.

Lord, S. (1993). 'More Than Numbers', *Literacy Broadsheet*. No 36, January.

Macgregor, M (1992). 'Language Skills and Mathematics Learning', Language in Mathematics - Australian Reading Association 3: 2.

Macgregor, M. & Moore, R. (1991). *Teaching Mathematics in the Multicultural Classroom: a Resource for Teachers and Teacher Educators*, Institute of Education, University of Melbourne: Melbourne.
(available from Department of Science and Mathematics Education, Institute of Education, University of Melbourne Parkville 3052 ph 03 344 4000 fax 03 344 8739)

Marr, B., Anderson, C. & Tout, D. *Numeracy on the Line: Language Based Numeracy Activities for Adults*, National Automotive Language & Literacy Coordination Unit: Victoria.
(available from National Automotive Language and Literacy Coordination Unit Level 2, 651 Doncaster Rd. Doncaster 3108)

McCormack, R. & Pancini, G. (1991). *Learning to Learn: introducing adults to the culture,context and conventions of knowledge. A Guide for teachers*, Ministry of Education, Division of Further Education: Melbourne.

McGuirk, J (ed.) (1993). 'Numeracy All Over' Special Winter Edition of *Literacy & Numeracy Exchange*.

McRae, A. (1994). 'Assessing Students in Numeracy Programs' in *Numeracy in Focus*, No 1, January 1995.

McRae, A. (1991). 'Numeracy: The Other Partner'. *Literacy and Numeracy Exchange*, Winter No 1: 6–7.

McRae, A. & Norrish, D. (1994). *Learning to make Sense of Spelling*, Open Training and Education Network: Sydney.
(available from OTEN 199 Regent Street, Redfern 2016 ph 02 9318 7222 fax 02 9319 1759)

Metropolitan East Disadvantaged Schools Programme (DSP) (1993). *A Brief Introduction to Genre: Examples Six Factual Genres and their Generic Structures*, New South Wales Department of Education: Erskineville.
(available from DSP Bridge and Swanson Streets Erskineville 2043 ph 02 9517 6822)

Ministry of Education, Victoria. *The Language of Mathematics: its implications for teaching adult numeracy*, Occasional Paper 1, Division of Further Education.

Mottershead, L. (1977). *Metamorphosis: A Source Book of Mathematical Discovery*, Dale Seymour Publications: Palo Alto.

Mottershead, L., Thompson, A. & Wrightson, E. (1987). *Maths World 7*, McGraw Hill: Sydney.

Mottershead, L., Thompson, A. & Wrightson, E. (1987). *Maths World 8*, McGraw Hill: Sydney.

Norrish, D. (1993). *Unemployment and Beyond: Language Literacy and Numeracy Materials for teachers of Adult Education*, Adult Literacy Information Office: Ashfield.

Norrish, D. (1994). *Learning about Learning: A Resource Package for Teachers*, Foundation Studies Training Division, Adult Literacy Information Office: Ashfield.

NSW TAFE (1994). *Reading and Writing Roadshow Print Support Materials*, NSW Open Training and Education Network: Sydney.
(available from OTEN)

Nyholm, M (1992). 'Research Project - Language of Mathematics', *Language in Mathematics – Australian Reading Association*. Vol 3, No 2, December.

Osmond, P. (1990). The Why, Who, What and How of Assessment, *Good Practice in Australian Adult Literacy and Basic Education*, 7: 1.

Osmond, P., Barin, L., & Partlin, J. (1990). *Adult Basic Education Assessment Resources: Literacy and Numeracy*, Department of Employment Education and Training.

Pancini, G. & McCormack, R. (1991). Becoming an active reader, *Good Practice in Australian Adult Literacy and Basic Education*, 14: 2–3.

Partlin, J. (1991). 'Numeracy in RAWFA Classes'. *Literacy and Numeracy Exchange*, Winter No 1: 27–28.

Richards, L (1990). 'Measuring Things in Words: Language for Learning Mathematics'. *Language Arts* Vol 67, No 1, January.

Stacey, K. & Groves, S. (1990). *Strategies for Problem Solving: Lesson Plans for Developing Mathematical Thinking*, Latitude Publications: Victoria.
(available from Objective Learning Materials 41 Martin Place Glen Waverley 3150 ph 03 803 2822 fax 03 887 9495)

Stenmark, J. (1989). *Assessment Alternatives in Mathematics: An overview of assessmentt echniques that promote learning*, EQUALS and the California Mathematics Council University of California: California USA.
(available from Objective Learning Materials 41 Martin Place Glen Waverley 3150 ph 03 803 2822 fax 03 8879495)

Wallace, P. (1991). 'Talking About Mathematics'. *Literacy and Numeracy Exchange*, Winter No 1: 35–40.

Whatmough, H. (1991). 'Numeracy in Literacy Classes'. *Literacy and Numeracy Exchange*, Winter No 1: 29–30.

Wright, C (1991). 'As a Numeracy Teacher by Training and Experience, How do I Feel About Becoming Involved in Literacy Teaching?', *Literacy Broadsheet*, No 34, November.